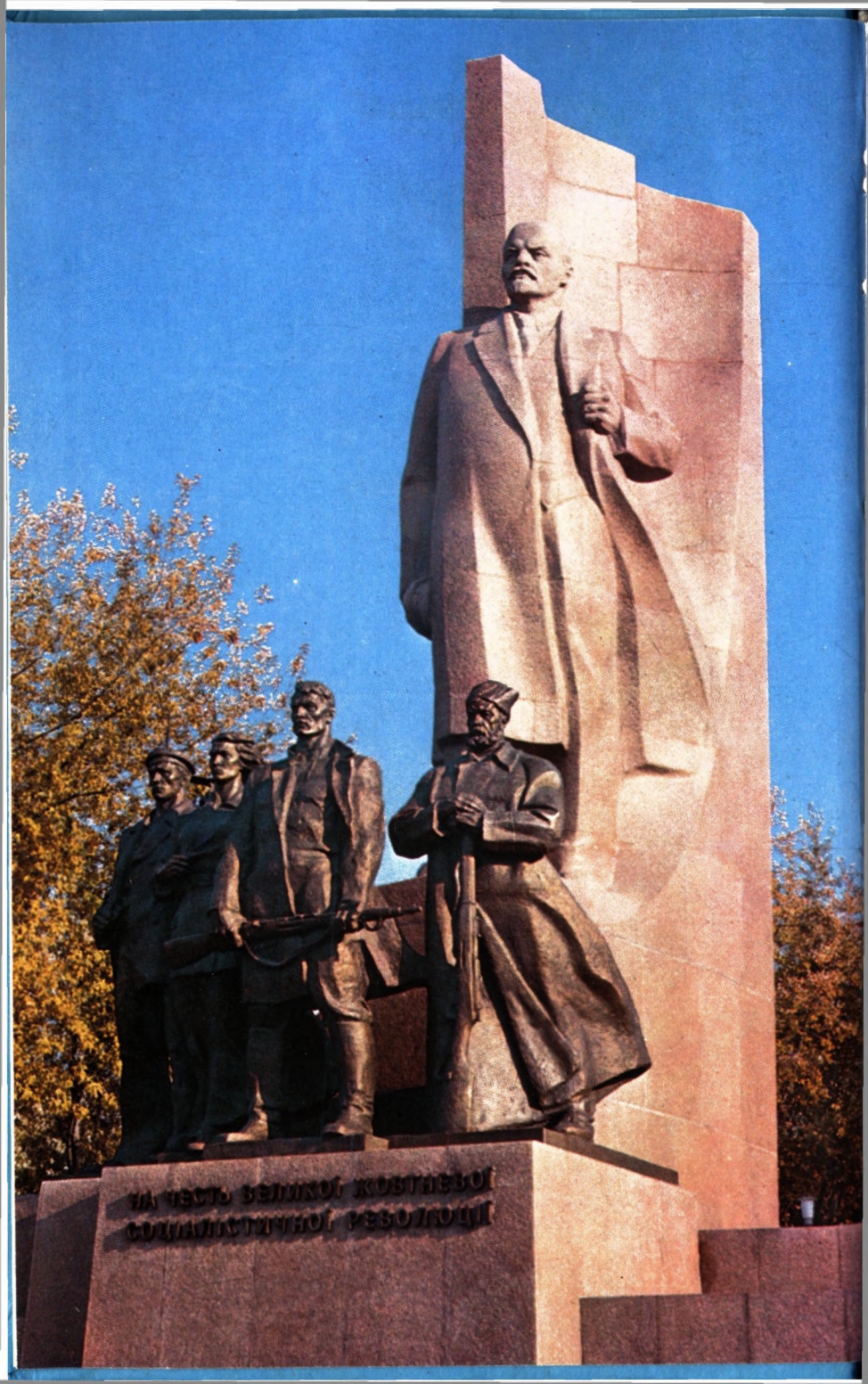
Soviet Ukraine


ВО ЧЕСТЬ ВЕЛИКОЙ ОКТЯБРЬСКОЙ
СОЦИАЛИСТИЧЕСКОЙ РЕВОЛЮЦИИ

Soviet Ukraine

(socio-economic reference book)

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Українська
РСР

The book which you are holding is a narration about Soviet Ukraine, one of fifteen republics of the Soviet Union. This is a story about the life of the industrious, revolutionary people who, in October 1917, embarked on the road of building a new, communist society. The working people of the Ukraine won many a glorious victory on this difficult but honourable road. During the socialist construction period they transformed their Republic from a backward, half colonial area of tsarist Russia into a sovereign state of all the people, possessing a powerful industrial potential, a highly developed agriculture and advanced science. Ukrainian culture has also attained great heights.

The 26th Congress of the Communist Party of the Soviet Union held in Moscow February 23 – March 3, 1981, outlined a new important stage in the life of the Soviet people. At the forum the best representatives of the Party summed up the multi-faceted activity of the CPSU, results of the Soviet people's devoted labour during the 10th Five-Year Plan period and during the 1970s. They charted out the inspiring prospects along the road of communist construction, worked out the Party general policy for the 1980s.

In 1980, having completed the fulfilment of the 10th Five-Year Plan for economic and social development, the Ukrainian SSR made a considerable step along the road to building communism and providing a high living standard. The successes achieved are due to the selfless labour of the working people in all branches of the national economy, are striking evidence of the strength of the socialist system, of the wise leadership of the Communist Party. This book presents the Ukrainian SSR's achievements in the economy, science and culture during the 10th Five-Year Plan period. It also shows what has been done during this period to raise the people's well-being, and acquaints the reader with the new, large-scale plans to be fulfilled by the Ukraine's working people in the 11th Five-Year Plan period.

In the United Family of Fraternal Peoples

МИР
ТРУД
МАЙ

Prior to the 1917 Great October Socialist Revolution the Ukraine's history for centuries was nothing but social and national oppression, forced labour, an extremely low production level, and unbearable living conditions for the toiling masses. This was the history of a continuous struggle of the Ukrainian people for its liberation.

Public protest against foreign enslavery and division of Ukrainian lands, against feudal oppression, were filled with the irresistible striving of the Ukrainian people to unite with the Russian people. The Liberation War of 1648–1654 turned into a genuinely nation-wide struggle against foreign domination which ended in the reunification of the Ukraine with Russia.

Possessing large natural resources in the Ukraine the people could not use them for their benefit before the Great October Socialist Revolution. The working people of the Ukraine not only suffered from exploitation by Ukrainian and Russian capitalists.

Foreign capital mastered the joint-stock companies which owned a considerable part of the Ukraine's plants,

factories and mines. There were 83 foreign joint-stock companies which invested almost 420,000,000 roubles in the Ukraine's industry. Foreign capitalists owned two-thirds of the coal industry fixed capital, while in metallurgy it was 90 per cent. Half of all foreign capital invested in the Ukraine came from French capitalists, one-third came from Belgians. The English, Germans and Americans also had capital invested. The major part of profits was taken abroad. Further foreign capital penetration threatened the independence of the country.

The Great October Socialist Revolution became a turning point in the historical destiny of the Ukrainian as well as other peoples of pre-revolutionary Russia. Its liberating mission, its most sincere humanism and genuine internationalism eloquently manifested themselves in the development of revolutionary events and their results in the Ukraine. Inspired by the example of the working class of Russia, the Ukraine's working people rose up in arms for the victory of the socialist revolution, for socialist transformation of society. And all that in the course of battles was dear to the hearts of the working people of the Ukraine, was expressed in Lenin's prophetic words: "Given united action by the Great-Russian and Ukrainian proletarians, a free Ukraine is *possible*; without such unity, it is out of the question".[1] Lenin showed the main laws and specific features of the economic, social, national development of both Russia and the Ukraine, a necessity of their joint effort in the struggle for the triumph of a new, socialist system. It was Lenin who unmasked and theoretically smashed the great-power chauvinism of Russian tsarism which oppressed the Ukrainian people along with all other peoples of Russia, retarded in every way possible the development of its language and culture, depreciated its national feelings and national dignity. Struggling for genuine equality and free development of all nations, Lenin sharply critisized any manifestation of bourgeois nationalism, Ukrainian included. He refuted the false and anti-scientific conception that the Ukrainian nation was classless and non-bourgeois, the conception which ignored class struggle within the nation, denied the proletariat's decisive role in social

[1] V. Lenin, *Collected Works*, Vol. 20, p. 31

progress. Lenin emphasized that the attempts of Ukrainian bourgeois nationalists to split the proletarian and all democratic forces according to nationality were nothing but a direct betrayal not only with respect to the Ukraine but with regard to democracy as a whole. "The class-conscious workers", wrote Lenin, "fight hard against every kind of nationalism, both the crude, violent, Black-Hundred nationalism, and that most refined nationalism which preaches the equality of nations together with ... the splitting up of the workers' cause, the workers' organisations and the working-class movement according to nationality. Unlike all the varieties of the nationalist bourgeoisie, the class-conscious workers ... stand, not only for the most complete, consistent and fully applied equality of nations and languages, but also for the amalgamation of the workers of the different nationalities in united proletarian organisations of every kind".[1]

The First All-Ukrainian Congress of Soviets * which was held from December 24 to December 25, 1917, in Kharkiv became a notable landmark in the Ukraine's history. Expressing the will of the working people of the Ukraine, the Congress proclaimed the transition of power to the Soviets and the formation of the Ukrainian Soviet Republic as a federative part of Soviet Russia. By its decision the Congress consolidated the victory of socialist revolution in the Ukraine, demonstrated the triumph of Leninist principles of proletarian internationalism, of the Communist Party's national policy.

The Leninist Party organisations which acted on the territory of the Republic organised the working people in their struggle for establishing Soviet power, for strengthening friendship among peoples. In July 1918, at their First Congress, these organisations were united into the Communist Party of the Ukraine as one of the detachments of the single Leninist Party. All this was of paramount importance for completing the struggle against foreign intervention and inner counter-revolution, for strengthening the power of the working people, for building a new life in the Republic.

[1] V. Lenin, *Collected Works*, Vol. 20, p. 289

* Soviets are elective representative bodies of state power in the USSR.

In December 1922, the creative activities of all the country's nations and nationalities, aimed at strengthening the cause of the Great October Revolution, resulted in voluntary unification of the Soviet republics into a single multi-national state – the Union of Soviet Socialist Republics, the Soviet Ukraine being one of its initiators and founders. The unity of all peoples into a single socialist state for the first time opened hitherto unseen prospects of social, economic and cultural progress of our Homeland on the basis of the Leninist plan for building a socialist society. In the unbreakable union with the fraternal peoples the Ukraine got a possiblity to start socialist construction, consolidation and development of the Ukrainian socialist nation.

The building of socialism created prerequisites for successfully solving the national question – one of the most painful, most dramatic questions in the history of human society. For a short historic period not only juridical but also factual inequality in the economic and cultural development of the peoples of the Land of Soviets was overcome. The working people of Russia spared no effort and energy in the name of economic and cultural rebirth of the outlying areas of the country, in the name of their accelerated advancement to socialism.

Reliable support from the fraternal peoples multiplied creative efforts of the working people of the Ukraine. During the years of socialist industrialisation the Republic remained the USSR's main base of the coal, metallurgical, machine-building and other leading branches of heavy industry. The Ukraine's industry was developed, being organically linked with other industrial districts and republics of the Soviet Union. Plants, factories, new projects of the Ukraine were continuously supplied with machine-tools, electrical equipment, apparatus from various towns of the Russian Federation. The Soviet Transcaucasian republics supplied the Ukrainian SSR with oil-products, Byelorussia – with timber, the republics of Central Asia – with cotton articles. The work collectives of various enterprises in Moscow, Gorky, Minsk, Bryansk and other cities and towns of the country took an active part in the construction of a giant of Soviet industry – the Kharkiv turbo-generator plant. In the shortest time were erected the Novokramatorsk machine-building plant, the "Zapo-

rizhstal" metallurgical works in Zaporizhya, the "Azovstal" metallurgical works in Zhdaniv, and also chemical factories. The representatives of 20 nationalities built the Kharkiv tractor plant during 15 months. Over one hundred plants, many All-Union amalgamations supplied it with equipment and various materials. Workers from Stalingrad and Leningrad shared their experience with the Ukrainian workers who had to master production processes at the Kharkiv tractor plant. The whole of the country was building the Dniprovsk hydroelectric power plant named after Lenin. About 600 engineers and skilled workers who had erected the USSR's first hydroelectric power plant in Volkhov were the first to arrive at the Dnieper's banks. Hundreds of representatives from various towns and republics were performing shock work.

The Ukrainian people received disinterested help from the fraternal peoples with gratitude. But at the same time they were selflessly giving a helping hand to other peoples of our country, lavishly, as with brothers, sharing with them the fruits of their labour, their achievements in science and technology, and their cultural values. In 1929 several thousand Ukrainian workers went to build the Stalingrad Tractor Plant. The working people of the Ukraine took an active part in building the Leninogorsk polymetallic integrated plant, the Chimkent lead works, in creating new coal and metallurgical bases in the East of the USSR, in building the Saratov harvester plant, the "Rostselmash" agriculture machinery works in Rostov-on-Don, textile mills in Tashkent and Ashkhabad, etc. The work teams from the Dniprovsk hydroelectric power plant helped construct the Tash-Sak irrigation system in Central Asia. The orders for the integrated metallurgical works of Magnitogorsk and Novokuznetsk were carried out by work collectives of more than 30 plants of Kharkiv, Odessa, Dnipropetrovsk, Zaporizhya and many other towns of the Ukrainian SSR.

The successful accomplishment of socialist industrialisation was of decisive importance for the development of all branches of national economy. This, in particular, laid foundations for the transition to socialist restructuring of agriculture. Small individual peasant steads of the pre-revolutionary Ukraine were replaced by large state and collective farms of the Socialist Ukraine equipped

with up-to-date machinery. A glorious page to the consolidation of collective farms of the young Socialist State was added by the 25,000 workers who, on the Party's call, went to the countryside in 1930. In the Ukraine alone the number of these enthusiasts was almost 8,500. More than 2,000 out of them went to work outside the Republic.

But the peaceful development of the Land of Soviets was interrupted by the treacherous attack of Fascist Germany on June 22, 1941. The enemy believed the multinational Soviet State to fall to pieces at the first blows. But all the peoples of the country stood up staunchly for its defence. Rallied ever more closely round the Leninist Communist Party, displaying miracles of heroism both at the front and in the rear, overcoming incredible hardships, the Soviet people defeated the deadly enemy, defended the gains of the Great October Socialist Revolution, upheld the independence of its Motherland and made a decisive contribution to saving world civilisation from fascism.

The victory over fascism has demonstrated once again great friendship among the peoples of our country. It was due to this friendship that the Soviet Ukraine could defend its freedom and its very existence.

The working people of the Ukraine were also given a helping hand when they had to raise from the ruins 714 towns and settlements, 28,000 villages, 16,150 industrial enterprises, thousands of collective and state farms, schools, hospitals, about 40 per cent of domestic buildings destroyed by the fascists. The Ukraine's towns and villages were sent specialists, materials and equipment by the fraternal republics. Thousands of engineers and workers helped heal as soon as possible the "wounds" which seemed to be incurable. As back as 1950, i. e. five years after the end of the war, the Ukraine did not only achieve its pre-war production level but also surpassed it.

Today the Republic's economy – an organic part of the single national-economic complex of the country – is developing dynamically and at high tempoes. Over the past decade the Republic has virtually doubled its economic potential. Electronics, chemistry, petrochemistry, electric-power, machine-building and radio industry have received priority in their development.

The working people of our Republic, inspiredly and creatively, together with all the Soviet people realise the plans charted by the Communist Party. The 10th Five-Year Plan of economic and social development for 1976–1980, taking into account specific features and requirements of each of the republics, envisaged their further harmonious development, their general upsurge to new heights of social progress. Summing up the results of the 10th Five-Year Plan, L. I. Brezhnev, General Secretary of the CPSU Central Committee, noted at the 26th Party Congress: "The country has made substantial progress in all the areas of building the material and technical basis of communism. The productive forces of Soviet society have attained a qualitatively new level".

The shock work of the working people of town and countryside has yielded good results. The industrial production output in the Republic in the 10th Five-Year Plan period increased as compared to the 9th Five-Year Plan period by 123.5 thousand million roubles or about one-third, while the gross output of agriculture in the social sector increased by 10 thousand million roubles.

The increase of the national income in the past five years exceeded 70 thousand million roubles which is approximately equal to its absolute value for the whole year of 1975. It is of paramount importance that over four-fifths of this increase were received due to the rise of labour productivity. The capital investments in the national economy made up 93.9 thousand million roubles or 19.6 per cent higher than in the previous five years. The basic assets increased by 71.2 thousand million roubles or 1.3 times. 150 large, up-to-date industrial enterprises and about 1,900 industrial units and capacities were put into operation.

In the All-Union division of labour the Ukraine plays an important role as an energy-producing, fuel and metallurgical base. The Republic extracts a considerable amount of coal and natural gas, gives over half of the All-Union output of iron ore as well as almost 40 per cent of the production of steel and steel pipes.

The most important factor of a rapid growth and consolidation of the single national-economy complex of the USSR, of all-round development of its component parts

is a continuous, purposeful and systematic production exchange realised among the republics.

As is stated in the Guidelines for the Economic and Social Development of the USSR for 1981–1985 and the Period Ending in 1990, adopted by the 26th Party Congress, the Ukrainian SSR's economic potential will be further increased by strengthening the economic, production-technological, scientific and cultural relations with all the Union Republics. This is the only correct way to meet the objective processes of development, the essential interests both of the Ukrainian and all the peoples of the Land of Soviets.

Socialist emulation of work collectives, towns, districts, regions and republics has become a wonderful school of international education, a reliable means for strengthening frienship and brotherhood among the Soviet peoples.

Socialist emulation has acquired a nation-wide scope. Soviet reality is a convincing proof of Lenin's genuine foresight that "socialism, by organising production without class oppression, by ensuring the well-being of all members of the state, gives full play to the "sympathies" of the population, thereby promoting and greatly accelerating the drawing together and fusion of the nations".[1]

Socialist emulation between the Russian Federation and the Soviet Ukraine, work collectives of the Ukrainian SSR and those of other republics has deeply rooted traditions. Close economic ties, comradely mutual assistance and creative cooperation unite machine builders of Moscow and Kiev, Ukrainian metallurgists and those from Kazakhstan and the Urals, miners of the Donets and the Kuznetsk Basins, turbine constructors from Kharkiv and Leningrad. Socialist emulation among the toilers of agriculture of the Ukraine and of other sister republics enhances responsibility for the results of work of many supplying enterprises, cultivates the sense of concern for the state interests.

Considerable successes have been achieved by the Ukraine in developing education, medical service and social ensurance.

A striking illustration of tremendous achievements of the Leninist national policy of the CPSU is the de-

[1] V. Lenin, *Collected Works*, vol. 22, p. 324

velopment of science in the Ukraine. More than 194,000 scientific associates work at the institutes of the Republic's Academy of Sciences, branch scientific and research institutes, project planning organisations as well as at the institutions of higher learning. The Ukrainian scientists in the creative collaboration with scientific collectives of Moscow, Leningrad, Novosibirsk, of all the Union Republics make a tangible contribution to the fundamental researches. Many works by Ukrainian scientists have become the base for developing new materials, technologies and automated control systems.

The transforming force of socialism has shown its vivid example in the realisation of the cultural revolution. Its main content was to create a socialist culture, to uplift people's education, to propagate communist ideology and provide its deep penetration into the social life of the people, to overcome petty-bourgeois mentalities, and also to provide cadres from the midst of workers and peasants. The cultural revolution bore generous fruits. The Socialist Ukraine has turned into the Republic of complete literacy, the Soviet intelligentsia has grown up, talents of hundreds of scientists and art workers have developed.

A considerable contribution to the enrichment of social treasure-trove of the Soviet people is made by the Ukrainian Soviet theatrical art, music and painting. The Communist Party of the Ukraine does its best for consolidating deeply rooted folk foundations of Ukrainian socialist culture, for developing its links with cultures of the fraternal peoples of our Motherland, of the countries of socialist community, with progressive world culture.

The Ukrainian people's culture draws on the ideas of proletarian solidarity, on spiritual kinship and contacts with the literatures and arts of all the socialist nations of the Soviet Union, and with the culture of the great Russian people in the first place. The transformation of internationalism into a deep conviction, into the norm of behaviour of the Soviet people is a great gain of ideological activity of the Communist Party in the period of building socialism in the USSR. This is a really revolutionary overturn in social consciousness which is realised, first of all, due to the fact that the Party itself, as

L. I. Brezhnev wrote, "is the most striking embodiment of militant comradeship and friendship of the working people of the USSR, of the inviolable unity of the entire Soviet people".

In the process of flourishing and drawing together of socialist nations, of great importance is a strict observance of Lenin's requirements as to the full equality of the languages. It has found its reflection in the Programme of the CPSU and has been codified by the Constitution of the USSR. Anti-communist, bourgeois-nationalist calumny about "pushing aside to the background", "dying off" of the mother tongues of the peoples of the Soviet Union is refuted by the census data of 1979. In the Ukrainian SSR, 88.5 per cent of the entire population consider the Ukrainian language to be their mother tongue. At the same time the Russian language is practised on a large scale, having become a means of communication and cooperation of the peoples of the USSR.

The emergence of the new socio-economic, political and spiritual entity, never known before by world history, is one of the most radical transformations exercised under the leadership of the Communist Party.

Due to persistent and purposeful ideological and political work of the Party on international education of the working people there appeared and developed a lofty patriotic sentiment of the Soviet people – the sentiment of a single family. This joins the peoples together, unites thoughts and efforts of all Soviet people.

The nation-wide spreading and consolidation in the Soviet society of the Marxist-Leninist teaching as the only ideological foundation of Soviet way of life, as the ideology on whose grounds the process of development and drawing together of the cultures comes into play is the most decisive factor of the ever growing social unity of the USSR's peoples.

The ideological unity of social life of the Soviet people which is based on community of the purpose, on socialist culture, on communist morality contributes to fostering the working people's Soviet patriotism, socialist internationalism, a conscious attitude to the execution of their duty in defending the gains of socialism.

The Republic's achievements in the socio-economic and cultural fields are legally registered in the Consti-

tution of the Ukrainian SSR. Worked out on the basis of and in conformity with the Fundamental Law of the USSR, the Constitution of the Ukrainian SSR rests on the principles of the Leninist national policy. It embodies Lenin's ideas on national and state organisation, genuine democratism of the Socialist Constitution, its fundamental advantages over any bourgeois constitution. The basic principle of both the Constitution of the Ukrainian SSR and the Constitutions of all the sister republics is the principle of proletarian internationalism, equality and friendship among the peoples. The preamble of the Constitution of the Ukrainian SSR reads: "The Ukrainian Soviet Socialist Republic is an equal republic in the Union of Soviet Socialist Republics which is an embodiment of the state unity of the Soviet people and unites all nations and nationalities with the aim of the joint construction of communism".

The 1977 celebration of the 60th anniversary of the establishment of Soviet power in the Ukraine and the formation of the Ukrainian SSR demonstrated friendship and brotherhood among the peoples of the USSR. On December 23, 1977, at the grand meeting of the Central Committee of the Communist Party of the Ukraine and the Supreme Soviet of the Ukrainian SSR, V. V. Shcherbitsky, member of the Politbureau of the CPSU Central Committee, First Secretary of the Central Committee of the Communist Party of the Ukraine, said: "Today, on the day of our happy jubilee, we turn our minds to all peoples of our multinational Homeland, and primarily to the great Russian people. Everywhere and always, and particularly during difficult times in our history, the people of the Ukraine have always felt the reliable support and fraternal assistance of the Russian people. The "feeling of one family", glorified by our people, is the deepest and most sacred feeling for us.

"This noble feeling will be preserved for ever in the hearts of our people, we will preserve it as the "apple of our eye" and will transport it from generation to generation bequeathing it to our grandsons".

Social and Political Structure

КОНСТИТУЦИЯ
(ОСНОВНОЙ ЗАКОН)
СССР
НОВАЯ
КОНСТИТУЦИЯ
СОВЕТСКОГО
СОЮЗА
НЕСОМНЕННО
ОБОГАТИТ
ОБЩУЮ
СОКРОВИЩНИЦУ
ОПЫТА
МИРОВОГО
СОЦИАЛИЗМА

The Ukrainian SSR is a socialist state of all the people, which expresses the will and interests of the workers, peasants and intelligentsia, the working people of all nationalities of the Republic.

As all the Union Republics, the Ukrainian SSR is a sovereign state having its own Constitution. The acting Constitution of the Ukrainian SSR was adopted at the Seventh (Special) Session of the Supreme Soviet of the Ukrainian SSR of the Ninth Convocation on April 20, 1978.

The Constitution reflects the principles of the social structure and policy of the Republic, rights, freedoms and duties of citizens, the national-state and administrative-territorial structure of the Ukrainian SSR, the system of state bodies of the Republic, democratic principles of their organisation and activity.

The highest body of state authority of the Ukrainian SSR is the Supreme Soviet of the Ukrainian SSR. It is empowered to decide on all matters within the jurisdiction of the Ukrainian SSR, as defined by the USSR Constitution and by the Constitution of the Ukrainian SSR.

The Supreme Soviet of the Ukrainian SSR is elected by citizens of the Ukrainian SSR on the basis of universal, equal, and direct suffrage by secret ballot. Its deputies are plenipotentiaries of the people in the highest body of state authority.

An important form of the Supreme Soviet activity is the work of its sessions which are convened twice a year. A session consists of sittings of the Supreme Soviet, and of meetings of its standing and other commissions held between the sittings.

A standing body of the Supreme Soviet of the Ukrainian SSR is its Presidium whose work is accountable to the Supreme Soviet of the Ukrainian SSR. In the period between sessions the Presidium of the Supreme Soviet exercises functions of the highest body of state authority of the Republic.

The Supreme Soviet of the Ukrainian SSR elects standing commissions from among the deputies to make preliminary considerations of questions, to promote execution of the laws and decisions of the Supreme Soviet, and to check on the work of state bodies and organisations. The present composition of the Supreme Soviet has elected 17 standing commissions which include 549 deputies or 84.5 per cent of their total number.

The Supreme Soviet of the Ukrainian SSR is the highest link of the Republic's single system of the state authority bodies. This system involves 25 regional, 479 district, 412 city, 120 urban-district, 793 rural-district and 8,522 village Soviets of People's Deputies. Almost three quarters of deputies of the local Soviets are workers and collective farmers.

The Council of Ministers of the Ukrainian SSR, i. e. the Government of the Ukrainian SSR, formed by the Supreme Soviet, is the highest executive and administrative body of state authority of the Republic. The Presidium of the Council of Ministers of the Ukrainian SSR functions as its standing body to deal with questions relating to the management of the national economy, and with other matters of state administration.

The Ukrainian SSR, as a sovereign state, has its own territory. This territory shall not be altered without the Republic's consent. The borders between the Ukrainian SSR and other Union Republics can be altered by mutual

agreement of the respective republics. But as far as the territory of the Union of Soviet Socialist Republics is a single entity and comprises the territories of the Union Republics (Art. 75 of the USSR's Constitution), the agreement between the republics on altering their borders is subject to ratification by the Union of Soviet Socialist Republics. The Republic excercises independent authority on all questions relating to its administrative-territorial structure.

The Republic's citizenship is an important feature of sovereignty of the Ukrainian SSR. In accordance with uniform federal citizenship established in the USSR, every citizen of the Ukrainian SSR is a citizen of the USSR. Citizens of other Union republics enjoy equal rights with citizens of the Ukrainian SSR throughout the Ukrainian SSR.

The procedure for acquiring or forfeiting Soviet citizenship is defined by the Law on Citizenship of the USSR adopted by the Supreme Soviet of the Union of Soviet Socialist Republics on December 1, 1978. In conformity with this Law, a Union republic (as represented by the Presidium of the Supreme Soviet of the Republic) has the right to acquire to its citizenship and simultaneously to the citizenship of the USSR foreign citizens and stateless persons if they have permanent residence on the territory of the Republic. Other cases of acquiring the USSR's citizenship as well as all questions on forfeiting Soviet citizenship are under jurisdiction of the Presidium of the Supreme Soviet of the USSR.

The Ukrainian SSR has the right to enter into relations with other states, conclude treaties with them, exchange diplomatic and consular representatives, and take part in the work of international organisations. Our Republic widely enjoys this right in its international activity. The Ukrainian SSR – one of the founder states of the United Nations Organisation – took an active part in working out the UNO Charter. Nowadays the Ukrainian SSR is an active member of the UNO as well as of many other international organisations and their bodies.

In its foreign policy the Ukrainian SSR is guided by the aims, tasks and principles of foreign policy defined by the Constitution of the USSR: observance of the principles of sovereign equality, mutual renunciation of

the use or threat of force, inviolability of frontiers, territorial integrity of states, peaceful settlement of disputes, non-intervention in internal affairs, respect for human rights and fundamental freedoms, the equal rights of peoples and their right to decide their own destiny, cooperation among states, fulfilment in good faith of obligations arising from the generally recognised principles and rules of international law, and from the international treaties signed by the USSR.

Sovereign rights of the Ukrainian SSR, as of all the other Union Republics, are safeguarded by the Union of Soviet Socialist Republics.

All victories, all everyday life of the Soviet peopie are inseparably linked with the Communist Party.

The guiding role of the Communist Party is determined by objective factors, by the entire course of social development and requirements of socialist society. The construction of communism is a grandiose and an immensely complicated task whose realisation means fundamental transformation of all aspects of social life. Communist society (its lower and higher phases) unlike all preceding social-economic formations, does not arise spontaneously, but is a result of conscious and systematic activity of the working people.

The CPSU is a party of scientific communism. In its activity it is guided by the Marxist-Leninist teaching. "Marxism-Leninism", L. I. Brezhnev pointed out, "is the only reliable basis for formulating the right strategy and tactics. It gives us an understanding of the historical perspective, helps us to determine the lines of our socio-economic and political development for years ahead, and correctly to find our orientation in international developments".

Constantly developing the revolutionary theory, the Party combines it with the revolutionary practice of the working class and of all working people. Based on the theoretical comprehension of the accumulated experience, phenomena and processes of social life, the Party most fully expresses the imminent requirements of social development, works out fundamental problems of communist construction, provides for a thorough and all-round substantiation of the ways of their practical solution. In the light of striking achievements of the Soviet

people, the known Lenin's formula assumes even more profound meaning today: "The Party is the intellect, honour, and conscience of our epoch".

The Leninist Party is the live incarnation of proletarian socialist internationalism. It is international in its Marxist-Leninist ideology, organically combining the tasks of communist construction in our country with its international duty with respect to the international revolutionary movement, to the working people of other countries. Since the very first days of its existence the Party acts as an international organisation which unites all communists irrespective of their nationality and carries out work in the entire international mass of the working people. Worked out by V. I. Lenin and tested by time, the Party's organisational make-up, based on the principles of democratic centralism and proletarian internationalism, makes it possible to fully take into account the national, cultural, social and other features of all the peoples of our country.

An important role in deciding the common Party tasks is played by the Communist Party of the Ukraine – one of the militant detachments of the CPSU. It strives selflessly for translating into life the Party's general line, works out such measures, ways, methods and techniques of its realisation which most fully take into consideration local possibilities, reserves, innovation and initiative of the masses.

The Communist Party of the Ukraine steadfastly multiplies its ranks by accepting the most conscious, foremost part of the working class, the collective-farm peasantry and the intelligentsia.

Quantitative Composition of the Ukraine's Communist Party

Year	1918	1940	1965	1970	1975	1980
Strength	4,364	505,706	1,829,368	2,301,657	2,565,110	2,933,504

In the Communist Party of the Ukraine the number of primary Party organisations has amounted to almost 67,000. Nowadays, in fact, there is not a single large

area of communist construction having no Party collective.

The CPSU is a party of the working class – the only truly consistent, revolutionary, most organised and conscious class which is capable of leading struggle, of joining efforts of all the working people to achieve the highest goal. In the composition of the Ukraine's Communist Party, as of the entire Party, the proportion of workers is constantly growing. In 1980, for example, 43.8 per cent were workers, 15.9 per cent – peasants, 40.3 per cent – office workers and other categories.

Almost a quarter of the Republic's Party organisation are women.

The Communist Party is the highest form of sociopolitical organisation, the core of the political system of the society of mature socialism. Unlike all other organisations, it expresses interests not of separate social groups and strata, but those of the entire people. The Party exists for the people and sees the essence of its activity in serving the people. Acting as a public force, the CPSU most fully and consistently takes into account, unites and coordinates the interests and requirements of all classes and social groups, of all nations and nationalities, of all generations of our society, of all its state and public organisations, directs them into the channel of interests of the whole state. Communists are the guiding and most active core of these organisations. 234,521 deputies of the Republic's local Soviets are communists. Among the deputies of the Supreme Soviet of the Ukrainian SSR there are 447 members and candidate-members of the CPSU.

The Communist Party of the Soviet Union is the ruling party. This Party's role is codified in the Constitution of the USSR. Acting within the framework of the Fundamental Law of the Union of Soviet Socialist Republics, the Party and its organisations do not have juridical power as the state bodies do. But as the advanced, most conscious, organised detachment, acknowledged vanguard of the Soviet people who are building communism, as the most authoritative force of society, the Party bears full responsibility for communist construction, including the activities of the state and public organisations.

The guiding activities of the CPSU embrace all sides of our life, are immensely rich in the content and in the forms of realisation of its goal. There has not been and there is not a single important problem in whose solution our Party would not put its collective mind. Economics and socio-political problems of development of Soviet society, its social life and international questions – all this is invariably in the focus of its attention.

The CPSU's policy which is based on scientific estimation of the objective laws of social development, of the main interests of the Soviet people, is the vital basis of Soviet society.

Solving the tasks of communist construction, the CPSU proceeds from the fact that the economy, the creation of material and technical base of communism is the decisive sphere of struggle for communism. Here the Party's leading role is manifested with a special force. That is why it is in the sphere of material production that over three quarters of the Ukraine's communists work. Their number has grown and their role is becoming more important in the fields of science, people's education as well as in the sphere of consumer service.

The CPSU directs socio-political life of the country, persistently consolidates the social homogeneity and unity of Soviet society. Based on the acknowledgement of the leading role of the working class, the Party is tirelessly strengthening its alliance with the collective-farm peasantry and the working intelligentsia. It carries out purposeful work on ensuring a further all-round drawing together of nations and nationalities of the USSR, on strengthening the integrity of the Soviet people as well as on the communist education of the Soviet people.

The activity of the CPSU Central Committee, of its Politbureau and Secretariat is a striking example of genuinely Leninist principles of collective leadership.

Following the example of the CPSU Central Committee, questions of party work of primary Party organisations are systematically considered by the Central Committee of the Communist Party of the Ukraine and by the Republic's Party Committees. Summing up the acquired experience, they direct the efforts of the primary organisations at their further organisational and political strengthening, at the activation of work in the masses.

In the country which is building a communist society, alongside the enhancing of the role of the Party, the role of the state and public organisations is also increased and socialist democracy is being further developed, one of its forms being the Soviets of People's Deputies. The Soviets which are the elective representatives of the people constitute the political foundation of the USSR. The Soviets most fully reflect the will and interests of each of its national and social groups. At the elections held on February 24, 1980, 524,185 deputies were elected to the local Soviets of People's Deputies of the Ukrainian SSR, of these 48.3 per cent being women. Of the total number of these deputies 33.7 per cent are workers, 39 per cent are collective farmers, 32.1 per cent of them being persons under 30.

650 persons have been elected deputies to the Supreme Soviet of the Ukrainian SSR of the Tenth Convocation. Of these 204 are workers, i. e. miners, metallurgists, chemists, builders, and working people of other branches, 125 are collective farmers. The workers and collective farmers together make up 50.6 per cent of the total number of deputies. 48 workers of science, culture, literature, art, education, health protection and press, 89 Party functionaries, 115 representatives of state and Soviet bodies, as well as 5 trade union and Young Communist League (YCL or Komsomol) workers have been elected to the Republic's highest body of authority.

The Soviets of People's Deputies represent both state and public organisations. They ensure state guidance of the entire political, economic and cultural life.

The broad rights the public organisations in Soviet society are vested with are registered by the Constitution of the USSR. The trade unions, the Leninist Young Communist League, the bodies of people's control, as well as other public organisations take part in managing the state and public affairs. For example, among deputies of the local Soviets 105,356 or 21.2 per cent are Young Communist League members, 86 YCL's members being elected to the Supreme Soviet of the Ukrainian SSR.

The Leninist Young Communist League – a mass non-Party organisation – is an active, creative force of Soviet society. It unites in its ranks the foremost youth at the age of 15 to 28. The main task of this organisation is

communist education of the youth in the spirit of collectivism, diligence, proletarian internationalism and patriotism. Regarding themselves as assistants to communists, the YCL's members mobilise Soviet youth for fulfilling the tasks set by the Party.

In Soviet society the role of trade unions is ever growing. As was noted in the Report of the CPSU Central Committee to the 26th Party Congress, "... the trade unions embrace practically all the working people. They have exceedingly broad tasks and rights. They protect the interests of working people, take part in resolving economic, social, and cultural problems, and do much to foster socialist emulation, invention, and innovation".

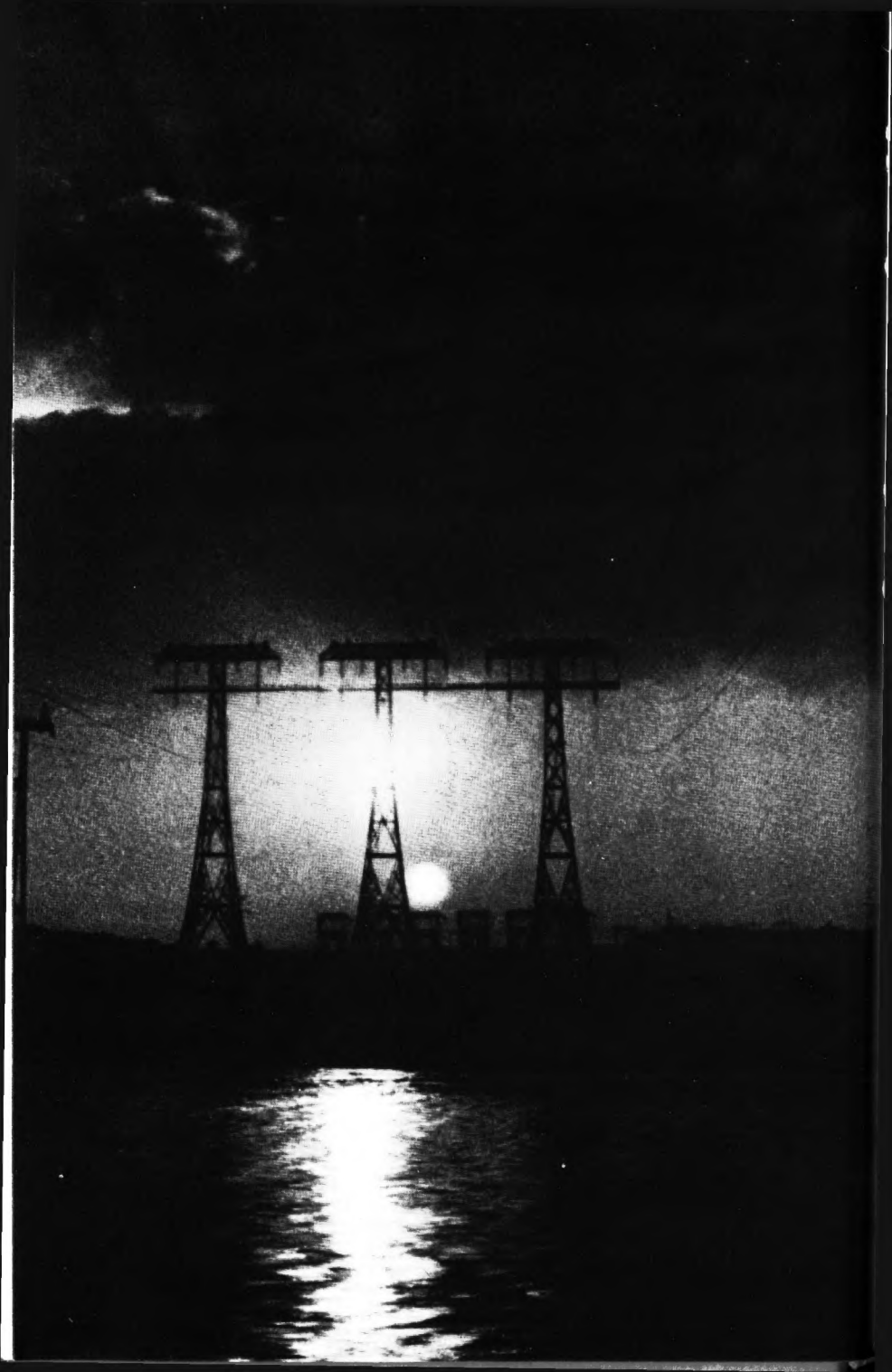
Trade unions participate directly in managing production, assuming the responsibility for exercising many administrative functions at the enterprises, take part in developing and fulfilling the economic plans. The trade unions see to it that the funds allocated for social ensurance of the working people are properly used, they also check on strict observance of labour legislation. In resolving socio-economic tasks, the trade union organisations make use of such tested means as work collectives' rallies, permanent production meetings, collective agreements, and workers' control.

In the Ukrainian SSR the number of the trade union enrolment is steadfastly increasing. In 1918, for example, the trade unions numbered about 500,000, in 1958 the figure was 8,961,500, and in 1980 the membership amounted to 25,000,000.

An important role in the Republic is excercised by the bodies of people's control. They must check on the fulfilment of the state plans and assignments, combat breaches of state discipline, mismanagement, extravagance and manifestations of localistic tendencies, etc.

Taking part in the management of the state, the public organisations work to promote a qualitatively new stage in the advancement of Soviet democracy, providing for everybody an opportunity to make his contribution to the cause of developing the society.

Territory and Economic Areas



One of the tasks mapped out by the 26th Party Congress for the 1980s is to ensure an efficient utilisation of material and labour resources which is the decisive and most effective method for increasing the national wealth of the country, for a rapid growth of socialist accumulations and consumption resources. In order to provide a dynamic and proportional development of the Soviet Union's economy, of paramount importance is a further growth, and perfection of distribution of the productive forces of each Union Republic. This in full measure applies to the economy of the Ukrainian SSR.

The Ukrainian SSR is situated in the south-western part of the USSR and occupies rather a favourable economic and geographical location. Its territory is 603,700 sq km or 2.7 per cent of the USSR's territory. The Ukraine numbers 412 cities and towns, 899 townships as well as thousands of villages. The Ukraine ranks second as to the population and third as to the territory among the republics of the Land of Soviets.

It is bounded by the Russian Federation on the north-east and east, by the Byelorussian SSR on the north,

by the Moldavian SSR on the south-west. In the west the Ukraine's border is the state boundary of the Soviet Union with the countries of socialist community – Poland, Hungary, Czechoslovakia and Rumania. The Ukraine is washed by the Black Sea and the Sea of Azov on the south.

The Ukraine has favourable natural-climatic conditions. They are characterised by a mild and warm climate with a prolonged summer and a short winter, considerable areas of fertile *chernozem* (black earth) soils and a sufficient amount of precipitations. Most of the territory of the Ukraine, except mountain regions of the Crimea and the Carpathians, is a flat country, the relief being favourable for economic activities, in particular, for placing industrial enterprises, building settlements, laying highways and developing intensive agriculture. The most important waterway – the Dnieper – (with the tributaries such as Desna, Pripyat, Psel, Sula, Vorskla, etc.) flows through the Ukraine. Several water reservoirs, created on the Dnieper, made it possible to improve water supply of industrial centres as well as to expand the area of irrigated lands. Of considerable water power resources are also such rivers as the Dniester, Seversky Donets, Southern Bug, Tisa, which determine the location of the productive forces and play an important role in their development.

The Republic's entrails are rich in almost all main types of mineral resources which are utilised in the national-economic complex. Here are concentrated over 21 per cent of commercial deposits of iron ores and natural combustible gases of the USSR, over 80 per cent of manganese ores, 50 per cent of the All-Union resources for production of mineral dyes, almost 30 per cent of primary kaolin and flux limestone, 80 per cent of bentonite clays, more than 31 per cent of ozocerite, 10 per cent of rock salt. Besides, there are deposits of potassium salts, oil, combustible shales, nickel, cement raw materials as well as various building and facing materials. The rational utilisation of natural resources and mineral raw materials promotes the development of electric-power engineering, fuel, metallurgical, chemical, china-earthenware, glass, building materials industries, etc.

The formation of the national-economic complex and the development of the productive forces to a considerable extent depend on the number of the population and its territorial distribution. At present the urban population comprises 62 per cent while the rural population is 38 per cent. The mean density of the population is 82.7 inhabitants per 1 sq km.

The Ukrainian SSR is a Republic with a highly developed industry, intensive agriculture, multi-branch infrastructure and developed transport network.

The Republic produces almost one-fifth of the All-Union aggregate social product. In the All-Union territorial division of labour the Ukraine ranks as an important energy-producing fuel, metallurgical and engineering base of the Soviet Union, as a region of great chemistry, food industry and other branches of material production. Most of the branches of the All-Union specification have a sufficiently high efficiency, profitableness and capital productivity. The Republic produces 53 per cent of the total amount of iron ore extracted in the USSR, 30 per cent of coal, 37 per cent of steel and almost two-thirds of sugar.

The impetuous growth of the productive forces of the Ukrainian SSR has become possible because the Republic's economy is closely related in its development with all the Union Republics of our country. L. I. Brezhnev noted: "...our half-century of experience is graphic confirmation of Lenin's ideas about the advantages offered by a large-scale, centralised national economy as compared with a fragmented economy. The pooling of the economic potentials and resources of all the Republics accelerates the development of each, the smallest and the largest alike. Management and planning of the economy on a Union scale have made it possible to effect a rational distribution of the productive forces; they afford scope for economic manoeuvre, and have helped to enhance co-operation and specialisation, which yield an overall benefit well in excess of a mere arithmetical addition of the individual efforts of each Republic, region and district".

In the Ukraine work is being carried out on perfecting branch-of-industry and territorial proportions of the national-economic complex of the Republic, which de-

termine scientific and technological progress of the entire national economy. The most characteristic feature of this process is increasing production capacities due to the reconstruction and expansion of the operating enterprises as well as due to erection of new ones.

Over the 10th Five-Year Plan period a considerable number of industrial enterprises has been reconstructed in the Ukraine. Among them are thermal and atomic power plants, powerful coal mines of the Donets and Lviv-Volyn Basins, engineering plants in Zaporizhya, Poltava, Ivano-Frankivsk, Berdyansk, Shepetivka, Ternopil, Kremenchuk, Kovel and others. Hundreds of new enterprises of radio-engineering, light and food industries have risen. All this contributed to a more even supply with manpower of the regions where new industrial projects are constructed, to rational utilisation of local labour, natural and economic resources.

The continuous implementation of the decisions of the 25th CPSU Congress and the 25th Congress of the Communist Party of the Ukraine made it possible to enhance the national income in the 10th Five-Year Plan period almost by 70,000 million roubles, as compared to the 9th Five-Year Plan, and to increase the industrial output almost by 123,000 million roubles. In 1980 the labour productivity in the Ukraine surpassed the level of 1975 by 16 per cent. The Republic numbers 31,900 mechanised continuous production flow and automatic lines, almost 12,500 of which having been put into operation in the 10th Five-Year Plan period. 8,700 enterprises, shops and sections have been completely mechanised and automated.

At the same time agriculture is being perfected which has turned into a highly developed branch of the economy with an extensive application of means of mechanisation and automation. Multi-branch agricultural production is a characteristic feature of the Ukrainian SSR. Having 15 per cent of the Soviet Union's sown area, the Republic produces a considerable amount of cereals, sunflower, sugar beet, vegetables, fruit and berries, meat and milk.

The Communist Party and the Soviet Government steadfastly embody into life the Leninist agrarian policy directed at the intensification of agricultural production. Capital investments, supplying agriculture with machinery,

fertilisers, etc. have been increased considerably. Over the 10th Five-Year Plan period more than 25,000 million roubles were allocated to strengthen the material and technological base of the Ukrainian SSR's agriculture. Since 1965 and to the end of the 10th Five-Year Plan period the capacity of the machine-tractor fleet increased 2.6 times while deliveries of mineral fertilisers – 2.8 times. In 1979 the areas of irrigated land were 1.9 million hectares and those with the drainage system – 2.4 million hectares.

During the 10th Five-Year Plan period the distribution of agricultural production has considerably been improved and its specialisation and concentration have been enhanced. As a result, a share of specialised state farms in the total volume of the main agricultural output has increased over 60 per cent.

The efficiency of distribution and development of the Republic's productive forces is promoted to a considerable extent by well-developed communications and transport systems. The Ukrainian SSR realises its economic ties with other republics by railway, motor, river, sea and air transport. For the time being the railway transport still prevails in carrying loads and passengers. In future its role will decrease because transfers by other types of transport will continuously increase. The Republic's freight turnover has reached 468,900 million ton/km. In 1980 the density of the transport network per 10,000 sq km of the territory included 371 km of railways, 78 km of inland waterways utilised for navigation, and over 2,000 km of hard-surface motor roads. The length of the utilised navigable waterways of the Republic has increased over 1.2 times and the shipment of freights – over 11 times, as compared to 1940. The total length of hard-surface motor roads mounted to 131,400 km as against 29,300 km in 1940, and the haulage of freight by them within that period increased 23.3 times.

More and more citizens make use of civil aviation which carried more than 12 million passengers in 1980.

A new type of transport, pipeline transport namely, has recently won recognition in the Soviet Ukraine's economy. Its freight turnover, including the Druzhba (Frendship) oil-pipeline has reached 52,200 million tariff ton/km.

During the 10th Five-Year Plan period much has been done to reconstruct the railway tracks of Donbas, as well as those in Vinnitsya, Transcarpathian and other regions. New wharves and heavy-duty hauling-up complexes have been constructed. The international ferrying Illichivsk-Varna has been put into operation.

Due to planned distribution of branches of material production much has been done lately to control the development of the Republic's settling system. The analysis of the research showed that the growth of urban population was accompanied by a considerable development of all cities, towns and townships. During 1959–1980 their number increased from 1,076 to 1,311 in the Republic. In this respect of special importance is the growth of the population of cities (such as Kiev, Kharkiv, Dnipropetrovsk, Odessa, Donetsk, Lviv; and others). The industrial potential of region seats (such as Poltava, Sumy, Cherkassy, Vinnitsya, Rovno, Lutsk, and others) is also increasing. Tangible changes have also taken place in the socio-economic development of small and medium towns and settlements. Such tendencies correspond to the guidelines adopted by the 26th CPSU Congress and the 26th Congress of the Communist Party of the Ukraine on checking the development of large cities and activating the growth of small and medium towns.

A rapid development of the extractive and processing industries, as showed the results of the research of the Council on Studying the Productive Forces of the Ukrainian SSR of the Academy of Sciences of the Ukrainian SSR, brought about qualitative changes in the national-economic functions of the towns. During the past five-year plans the towns which are located in the zone of convenient inter-district and district transport ways developed intensively to form industrial centres (Bila Tserkva, Kremenchuk, Khmelnitsky, Berdyansk, Simferopol, Pervomaysk, Pavlograd, Tokmak, Krasnoperekopsk, and others). Moreover, such towns are mostly not only industrial and transport centres but also organisational-economic, cultural and health-resort ones.

A further perfection of the development of urban settlements will continue on the basis of organising adequate systems of settling, i. e. on the basis of inter-

connected towns and settlements of various categories where equal conditions will be created as to the organisation of public services and amenities, work, life and leisure for the working people.

Scientific and technological progress in the national economy, intensive processes of urbanisation brought about positive tendencies in developing rural settling. Small settlements whose inhabitants cannot be provided with adequate public services and amenities as well as sufficient cultural level are being joined to large villages. Separate villages turn into townships, centres of agrarian-industrial complexes and amalgamations.

The Ukrainian SSR plays an important role in developing the inter-Republican economic ties with the major part of the Union Republics. It is responsible for over half of all the inter-Republican freight turnover of the Moldavian SSR, almost half of the Russian Federation's, up to one-fifth of the Lithuanian SSR's and Georgian SSR's, and up to one-sixth of that of the Latvian SSR. The main bulk of the Ukraine's production is delivered to the European part of the USSR. At the same time its deliveries to the Central-Asian Republics are being increased too.

To ensure a more efficient planning of the development of the productive forces, the Republic's territory is divided into three economic areas: the Donets-Dnieper, South-Western and Southern which include 25 administrative units or regions.

The Donets-Dnieper Economic Area. This is one of the most powerful industrial areas of the country. It includes 8 regions: Donetsk, Voroshilovgrad, Zaporizhya, Dnipropetrovsk, Kirovograd, Poltava, Sumy and Kharkiv. The Donets-Dnieper economic area occupies 220,900 sq km or 36.6 per cent of the total territory of the Ukrainian SSR.

As to the population, the Donets-Dnieper economic area ranks third in the USSR and second in the Republic. The bulk of the population (75 per cent) resides in towns and townships, which is conditioned by a high level of the area's industrial development. It numbers 175 towns and 442 townships. The highest density of urban population is in Donetsk, Dnipropetrovsk, Kharkiv, Zaporizhya, Kriviy Rig and Zhdanov.

The modern cities of the Donets-Dnieper economic area are those having broad avenues, green parks, multi-storeyed appartment houses with all amenities, large administrative centres, Palaces of culture, cinemas, theatres, museums and stadiums.

The Donets-Dnieper economic area, in the main, embraces Left-Bank Ukraine within the forest-steppe and steppe belts. Its climate is moderately continental, favourable for complete ripening of agricultural crops. The soils are diverse, ordinary and thick chernozems prevail, in the northern part of the area they are of podzolic and, in the southern part, of chestnut type. The following rivers run through this economic area: the Dnieper, Seversky Donets, Sula, Vorskla, Psel, Seim and others whose waters are used for industrial and agricultural production as well as for public utilities.

The entrails are rich in ore and other types of natural resources. Coal of the Donets Basin, iron ores of the Kriviy Rig region, of the Kremenchuk Basin, the Bilozersk and other deposits, manganese ores of the Nikopol and Tokmak Basins, flux lime and raw materials for the production of refractory materials are a reliable raw and fuel base for the metallurgical industry. Besides, on the territory of the area there are deposits of natural combustible gases and oil (Hnidyntsi, Yefremiv, Zachepiliv, Kachaniv, Shebelinka and others), of nickel, titanium, graphite, mercury, of raw materials for the production of aluminium, deposits of rare metals, chrome, rock salt, gypsum, limestones, raw materials for the production of building materials. All these are a good basis for efficient development of the productive forces.

Highly developed here are multi-branch metal-intensive machine-building, basic chemistry, building materials industry. Over the past decade the perfection of the industrial branch structure was accompanied by improving the territorial organisation of social production. In particular, the share of industry has been increased in such regions as Sumy, Poltava and Kirovograd.

The economic area ranks first in the Republic as to the volume of industrial output. Here are mined over half of the all-Union and almost 100 per cent of the Republic's iron ore, over 30 per cent and 90 per cent of coal, respectively; here are produced up to 40 per

cent and almost 100 per cent of steel, respectively, and over one-third of the all-Union production of steel pipes. The economic area's industry is characterised by a large-scale development of the coal and metallurgical branches which are concentrated in the Donets Basin and the Dnieper area.

Engineering has achieved a high level here too. The largest centres of engineering in this economic area are Donetsk, Kharkiv, Voroshilovgrad, Kriviy Rig, Zaporizhya, Dnipropetrovsk, Kirovograd and others. Here are constructed powerful enterprises of the chemical industry, the main being situated in Sumy, Severodonetsk, Horlivka, Lisichansk, Konstantinivka, Dniprodzerzhinsk and Slavyansk.

Of nationwide importance are the enterprises of the building materials industry, in particular, of cement and glass industries (producing almost one-third of the country's and over 90 per cent of the Republic's glass manufacture) which are situated in Kramatorsk, Yenakiyevo, Balakleya, Artemivsk, Slavyansk and Kharkiv.

A considerable part in the national complex of the area is played by agriculture which is specialised in the production of corn, sugar beet, sunflower and live-stock produce. This branch yields over one-third of the total Republic's output.

Plant growing is the main branch which accounts for almost two-thirds of this area agricultural produce.

Cattle-breeding of the dairy-meat type is also being intensively developed in this area. Live-stock, pigs and sheep are bred here. To provide the working people with fresh vegetables, fruit, milk and dairy produce, specialised farms have been organised round the region seats (Donetsk, Dnipropetrovsk, Kharkiv, Zaporizhya, Sumy, Poltava) as well as round such large industrial centres as Kriviy Rig, Horlivka, Kramatorsk, Lisichansk, Zhdanov, Kremenchuk, Pavlograd, and others.

Radical changes have also taken place in the development of the area transport. The length of the railway lines of general use exceeds 9,000 km, and the density of the railway network is 41 km per 1,000 sq km. Sufficiently high is the density of the railway lines in the Donets Basin (approximately 60 km per 1,000 sq km of the area). Of special importance are the main railway lines: Moscow –

Kharkiv – Lozova – Simferopol, Kharkiv – Dnipropetrovsk – Kherson, and the railway line linking the Donets coal basin with the Kriviy Rig iron ore basin. Also, for strengthening the inter-area ties of great importance is the Dnieper river running across the territory of the area for 430 km.

The Dnieper waters carry loads to the Donets-Dnieper area from the southern republics and vice versa. The economic ties of the area are also realised by motor roads, sea, air and pipe-line transport.

The South-Western Economic Area. As to the size and the number of population this economic area is the largest in the Ukrainian SSR, occupying 269,500 sq km (44.6 per cent of the Republic's total). It includes 13 regions: Vinnitsya, Volyn, Zhitomir, Zakarpatska, Ivano-Frankivsk, Kiev, Lviv, Rovno, Ternopil, Khmelnitsk, Cherkassy, Chernivtsi and Chernihiv.

The economic area embraces the western part of Right-Bank Ukraine. The climate here is moderately continental, favourable for agricultural production. The area soils are mainly fertile-type – from soddy podzolic and peat-boggy in Polissya to low humus chernozems and grey forest-podzolised soils in the forest-steppe belt. The main rivers of the area are the Dnieper (with its tributaries: the Pripyat and the Desna), the Dniester and the Tisa.

The South-Western area is rich in coniferous and mixed forests in Polissya; in beech, oak and hornbeam forests in the Carpathians. Mineral and raw material resources are also diverse in the area: here are deposits of coal (the Lviv-Volyn Basin), of natural gas, oil, hydrogenous coal, rock and table salts, sulphur, kaolin, peat, various raw materials for production of building materials, etc. More than 400 mineral water sources have been explored in the area.

As regards its population, the South-Western area ranks second in the USSR (after the Central Area) and first in the Ukraine. This is one of the most densely populated economic areas of the Soviet Union. 47 per cent of the population reside in cities, towns and townships. Located in the area are 13 cities with a population over 100,000. The largest of them are Kiev (2,232,000), Lviv (676,000), Vinnitsya (323,000), Zhitomir (250,000),

Chernihiv (245,000), Cherkassy (234,000), Chernivtsi (221,000), Rovno (185,000) and Khmelnitsky (179,000).

Due to the planned and proportional development of the area productive forces, the socio-economic basis of the cities and towns has been considerably consolidated. For example, in the western regions of the Ukraine, which were economically backward in the past, the cities are being intensively developed whose population did not grow until these regions were reunited with Soviet Ukraine. These are Lutsk, Ternopil, Rovno, Chernivtsi, Khmelnitsky, and others. Now the population and socio-economic potential of these cities are rapidly growing. The new towns appeared on the area's map: Andrushivka, Volochisk, Bershad, Vishneve, Kaharlyk, Pochayiv, Ladyzhyn, Khorostkiv, and others. Morshin, Truskavets, Polyana and Khmilnik have become health-resort and sanatorium centres known all over the USSR.

High growth rates of social production and, first of all, those of industry are provided in the area. The main branches in the industrial complex structure of the area are engineering and metal-working, light, food as well as forest, wood-working, wood-pulp and paper industries. These account for 85 per cent of the gross output of the area. In recent years engineering is becoming ever more important in the economic development of the area. Its main production includes machines and equipment for the chemical and food industries, for river vessels, road-building and agricultural machines. The largest centres of engineering and metal working are Kiev, Lviv, Vinnitsya, Zhitomir, Lutsk, Ivano-Frankivsk, Chernivtsi, Cherkassy and Khmelnitsky.

Varied is the production of the light industry which accounts for over one-third of knitted fabrics and sewing articles of the Republic. Renowned for their craftsmanship are workers of this branch whose main factories are concentrated in Kiev, Lviv, Chernihiv, Cherkassy, Vinnitsya, Ternopil, Chernivtsi and Rovno. The South-Western area is a large supplier of food industry produce. Especially great is its role in the production of sugar – up to 67 per cent of the Republic's total.

Rational distribution of the productive forces contributes to accelerating the development of economy in the area's western regions.

The electric-power engineering, machine-building and the chemical industry in the area contribute greatly to strengthening its economic potential. During the 9th Five-Year Plan period alone, 45 per cent of the total number of the Republic's new construction projects were located here. In the western regions, in particular, 74 industrial enterprises were built. There were commissioned a thermoplastic machine plant, foot-wear and sewing factories in Khmelnitsky, a prefabricated concrete plant and a knitted fabrics factory in Mukacheve, a plant for manufacturing plastics items in Lutsk. In the Ivano-Frankivsk region alone, 11 large industrial enterprises were put into operation. Besides, a considerable number of enterprises in towns and villages were reconstructed and expanded. In perspective, engineering and the chemical industry of the South-Western economic area will be given priority rates in its development.

Radical transformations have also taken place in the agriculture of this economic area. Here, the output per hectare of area is almost three times as much as the country's average. The farms of the economic area yield a considerable amount of the Republic's agricultural gross output: corn, buckwheat, sugar beets and potatoes. The area is an important flax-fibre and hop producer in the country.

Cattle breeding is also an important branch of agricultural production. About half of the Republic's cattle stock and pigs as well as one-third of sheep are concentrated here. The area accounts for about half of the Republic's production of meat, bacon and milk. Over the 10th Five-Year Plan period the ties between the farming agriculture and cattle breeding continued to strengthen. There was also an increase in the productivity of orchards and vineyards of the Transcarpathian and Podillya areas, famous all over the country. The area continues to develop the production specialisation and concentration, inter-collective farm and inter- economy cooperation and the production industrial integration. Here operate large cattle-breeding complexes such as, for example, the Kalityansk pork meat factory in the Kiev region producing 120,000 centners * of pork a year; poul-

* A centner equals 100 kg.

try farms, mixed feed mills, hothouse facilities and refrigerators.

There are all types of transport in the area: railway, motor, river, air, and pipeline. By means of railway lines of this economic area, external economic relations between the USSR and European countries are exercised. The main railway lines of the area have been fundamentally reconstructed. The railway line connecting Kiev with Moscow is completely electrified. Motor transport is also being developed at a fast rate; the length of modern highways increases. They connected Kiev with Moscow, Kharkiv, Odessa, Donetsk, Minsk, Lviv, Chernihiv, Simferopol, Uzhgorod and other cities and towns of the country.

An ever greater role in the area is played by the air and pipeline transport. Here the powerful gas pipeline "Soyuz" is laid (Orenburg – the western border of the USSR) constructed by the Soviet Union and CMEA member-states.

Favourable health-resort conditions of the Carpathian area made it possible to considerably expand the network of sanatoria, rest homes, boarding-houses, students' health camps, young pioneers' camps and tourist itineraries during the 10th Five-Year Plan period.

The Southern Economic Area. The Southern economic area embraces the southern part of the Republic and directly adjoins the Black Sea and partially the Sea of Azov. It includes four regions: Odessa, Mykolayiv, Kherson and Crimean, their total area being 113,400 sq km or 18.8 per cent of the Ukrainian SSR's territory.

The area is situated almost on a plain surface. Chernozem soils and a moderately warm climate contribute to the development of various branches of the national economy. A health-resort complex is set up here. The area has deposits of iron ores and fluxing limestones. It is famed for the salts of the coastal salt lakes, in particular, of Lake Sivash, for mineral water sources and mud-baths. Of great importance for the national economy of the area are such rivers as the Dnieper, the Danube, the Southern Bug and the Dniester.

Over two-thirds of the population of the Southern economic area (63 per cent) are urban dwellers. During the 10th Five-Year Plan period the number of towns here increased, totalling 45 in 1980. The largest of them

are Odessa, Mykolayiv, Simferopol, Kherson, Sevastopol and others. In these cities the population has been growing intensively. Here the industrial production, city transport means, science, culture as well as the sphere of services developed at a fast rate. The socio-economic base of medium and small towns (Bilohirsk, Voznesensk, Bilhorod-Dnistrovsky, Saki, Kotovsk, Pervomaysk, Reni) was also consolidated.

The industrial output accounts for over two-thirds of the Southern area's overall production, the predominant branches being engineering, in particular, shipbuilding, agricultural machine-building, light and food industries. Here are built sea-going and ocean-going ships, powerful suction-tube dredgers, crane ships, barges, comfortable river motorships, etc. The flagships of the home-made whaling flotillas "Soviet Ukraine" and "Soviet Russia" were built at the Black Sea shipyard (in Mykolayiv). The area manufactures the bulk of maize combine harvesters and almost 50 per cent of the USSR's tractor ploughs.

The most important centres of sea and river shipbuilding are Mykolayiv, Kherson, Kerch while those of ship repairs are Odessa, Sevastopol, Izmail and Kiliya. Maize combine harvesters are manufactured in Kherson, tractor ploughs – in Odessa, tractor trailers – in Djankoy, equipment for the light and food industries – in Odessa and Simferopol. Simferopol is also an important manufacturer of TV sets, Feodosiya – of stevedore equipment, while Kherson, Kakhovka and Pervomaysk – of electrical engineering.

The food industry is one of the leading branches of this economic area. Two-thirds of the output are provided by the enterprises of meat, oil pressing, dairy, fish, wine-making and canning industries. Meat-packing factories operate in Simferopol, Mykolayiv, Bilhorod-Dnistrovsky, Yalta, Kerch, Yevpatoriya. Large poultry farms are constructed in Odessa, Voznesensk and Pervomaysk, fish-canning enterprises and fisheries are located in Kherson, Kerch, Vilkovo, Henichesk, Ochakov and Kiliya. The Southern economic area ranks first in the Republic in the development of viticulture.

This economic area comprises almost 20 per cent of the Republic's sowing lands and 3 per cent of those of the USSR. Plant growing is mainly specialised on grow-

ing winter wheat, rice, sunflower, sugar beets, oil-bearing crops, vegetable and melon-cultivation, grapes, fruit, berries, tobacco, etc. The area produces over nine-tenths of the Republic's yield of grapes. The gross output of cereal crops accounts for a quarter of the Republic's total.

The Verkhnyorohachitsk, Inhulets, Krasnoznamyansk and other irrigation systems contribute much to expanding sowing areas and yielding stable crops. The North-Crimean canal was built using the Kakhovka water reservoir.

The livestock breeding is specialised in dairy-meat produce and the production of karakul.

Almost all types of transport, including railway, sea, river, motor and air are being developed in the area. The total length of the railway lines exceeds 3,000 km. A great role in the area is played by the sea transport. It connects the ports of the Black Sea and the Sea of Azov with those of the Caspian, Baltic, Barents Seas and of the Far East. The freight turnover of the Soviet Union with many foreign countries is realised through the area's ports.

A constant concern of the Communist Party and Soviet Government for the working people's well-being and public health finds its reflection in expanding sanatoria-resort facilities.

In conformity with the tasks for developing the Ukrainian SSR's economy in the 11th Five-Year Plan charted by the 26th Congress of the Communist Party of the Ukraine and the 26th CPSU Congress, and with the aim to increase the efficiency of social production, an extensive programme is envisaged for improving the distribution of the productive forces and all-round development of the Republic's all regions and districts.

Population

The population of the country is its most valuable asset. All that has been created on the earth is done by man's hands and his creative intellect. But it is only under socialism that the fruits of his labour belong to the working people. It is only under socialism that a concern for man, for the satisfaction of his constantly growing material and social requirements is the main purpose of society. It is just this that brings about great positive changes in the lives of our people. During the years of Soviet power the population of our country has increased and its socio-economic structure changed. A most important achievement of the society of developed socialism is the emergence of a new historic community of people – the Soviet people.

These significant positive changes also occurred in the life of the Ukrainian SSR. Its population numbering 50,100,000 constantly increases. On the eve of the Great Patriotic War of 1941–1945 (as of January 1, 1940), 41,300,000 people lived in the Ukraine. The Ukraine's losses inflicted by the war exceeded 5,000,000 people. Besides, during the war the birth rate sharply decreased,

the population death rate considerably increased, and the ratio between the male and female population was violated. All this had an adverse effect on the population growth rate in the post-war years. Only at the beginning of 1959 the total number of the population slightly exceeded the pre-war figure. According to the census carried out at that time the Ukraine's population numbered then 41,900,000. By 1970 the Republic's population had increased by 5,300,000 people, an average yearly increase of more than 10 persons per 1,000 inhabitants. During 1970–1980 the growth rate was 3 millions or 6.4 per cent.

In the Republic, according to the 1979 census, the ratio between the male and female population is gradually being levelled. In the pre-war year of 1940 the men made up 47.8 per cent while the women – 52.2 per cent of the total number of the population. In 1959 this ratio was 44.4 and 55.6 per cent, respectively. In the years that followed the ratio between the male and female population continued to improve. In 1980 the ratio between the women and men was 45.8 and 54.2 per cent, respectively. Between the last two censuses the growth rate of the male population was 7 per cent while that of the female was 5 per cent.

The growth of the population and change of its living conditions are inseparably linked with the economic and social development of the country. In a socialist society the economic development considerably exceeds the population growth rates, which fact, in its turn, contributes to a steadfast increase of material welfare of all members of society. The improving of the people's well-being is the core in the home policy of the CPSU. In 1980 the gross social product in the Ukrainian SSR grew, as compared with 1970, by 55 per cent, the gross industrial output by 72 per cent, the gross agricultural output by 8 per cent whereas the population grew by 6.4 per cent. Besides, considerable were the rates of development of the social consumption funds which play a great role in the life of all the Soviet people, especially of families having many children.

Increased rates of the economic development created prerequisites for increasing production and per capita consumption. Thus, within this period the annual consumption of meat and bacon in the Republic increased

from 49 to 60 kg, of milk and dairy products (estimated in milk units) from 311 to 329 kg, eggs – from 156 to 236 sugar – from 41.4 to 50.4 kg per capita, which testifies to an improved structure of nourishment.

The population growth is closely related to the concern displayed by the state for the mother and her child. In the Soviet Union the protection of mother and child is a state matter. Maternity is encouraged by all possible means.

The number of maternity homes, women's consultation clinics and the like is constantly increasing. The Republic numbers almost 40,000 hospital beds and beds for expectant mothers and women in childbirth, close to 5,000 women's consultation clinics, children's polyclinics and ambulatories. 2,400,000 children visit kindergartens and creches. The State provides mothers having many children with grants for maintaining and upbringing the children. In 1979 alone the State expenditures for this purpose were 20,000,000 roubles in the Ukrainian SSR.

The Guidelines for the Economic and Social Development of the USSR for 1981–1985 and for the Period Ending in 1990 envisage the implementation of an efficient demographic policy, the promotion of strengthening the family as the most important nucleus of a socialist society, the creation of better conditions for combining maternity with an active participation of women in labour and social activities.

In conformity with the decisions of the 26th Party Congress the CPSU Central Committee and the Soviet Government have adopted the resolution on measures to increase state assistance to families with children, which envisages, in particular, an increase of the state expenditure rates for nourishment in pre-school establishments by 10–15 per cent, free-of-charge accommodation of children in creches, kindergartens and boarding schools for the families having incomes of less than 60 roubles a month per each member. Allowances are increased when a child is born, new benefits are provided for single mothers, as well as a number of other measures directed at increasing the well-being of the families are taken.

The Soviet State was the first in the world to take full care of the people's health, as a result, mortality of the population from diseases has been considerably decreased.

During the years of Soviet power medical aid to the population has constantly been increasing. In the Ukrainian SSR there were 36 doctors per each 10,000 inhabitants in 1980. Medical aid is free of charge. In our country such severe and dangerous infectious diseases as smallpox, plague, epidemic typhus and others have been completely eradicated while mortality from other infectious diseases has been sharply reduced.

Much is being done to further improve all types of medical aid.

The Republic's high rates of industrial development are responsible for a predominant growth of the urban population. In 1980, 31,400,000 or 63 per cent of the Republic's total population resided in cities and townships. Between the last two censuses the number of urban residents increased by 4,800,000, of them 1,900,000 due to natural increase, and 2,900,000 as a result of transformation of villages and settlements into townships and moving rural residents there. The number of rural residents decreased by 2,200,000. For an industrially developed country such processes are quite natural. They are brought about by the growth of industrial production, large-scale construction, development of transport, as well as by enhancement of mechanisation and labour productivity in agriculture.

The number of towns in the Republic has increased by 148 as compared with the pre-war years. In 46 towns (as against 20 in 1939) the number of residents exceeded 100,000 and in 5 out of these, such as Kiev, Kharkiv, Dnipropetrovsk, Odessa and Donetsk, their number exceeded 1,000,000.

The population of industrial, cultural, scientific and administrative centres shows most rapid increase. In 1980, 17,400,000 people, or 56 per cent of the total urban population of the Republic lived in cities with a population over 100,000 (as against 5,900,000 in 1939 and 13,500,000 in 1970). It is in these cities, concentrating an overwhelming majority of skilled workers, engineers and other technicians, that the old enterprises were expanded and new ones set up. That is why people from other areas of the Republic were constantly coming here. These cities have become centres for preparing cadres of various specialities. Thus, during the period between the last two

censuses alone, from 1970 to 1979, the population of Zhitomir increased by 42 per cent, of Ivano-Frankivsk by 43 per cent, of Cherkassy by 44 per cent, of Lutsk by 46 per cent, of Vinnitsya by 49 per cent, of Chernihiv by 50 per cent, of Khmelnitsky by 52 per cent of Rovno by 55 per cent, and of Ternopil by 70 per cent.

Industrialisation and the continual growth of the economy of the Ukrainian SSR brought forth the formation of towns which have become large industrial centres. These are Severodonetsk, Lisichansk, Pavlograd, Bila Tserkva, Kremenchuk, Horlivka, Kriviy Rig, and others. At the same time small towns were being developed at accelerated rates, where new industrial enterprises were also built.

People are the main productive force. The deeper their knowledge, the greater their experience and skills, the higher is their creative activity, the wider are the possibilities for mastering new equipment and technologies, the more efficient are the processes for perfecting the national economy on the basis of scientific and technological progress.

The socialist social system has created all necessary conditions for the working people to promote their cultural level, to get an education and acquire specialised knowledge. Let us think over the following facts. Prior to the Revolution, according to the 1897 census, 72 per cent of the Ukraine's population, aged 9 to 49, were illiterate. 46 per cent of the urban and 76 per cent of the rural population could neither read nor write. The level of literacy of men in the country was almost 1.7 and of women 4.2 times lower than that in the urban areas.

During the first years of Soviet power, despite the Civil War and foreign intervention, the Party carried on intensive work to abolish illiteracy. As back as the end of 1926 the percentage of illiterate people had decreased almost two times and by the beginning of 1939 only 12 per cent of the population at the age of from 9 to 49 had been illiterate. The 1959, 1970 and 1979 censuses proved that the Ukrainian SSR is a Republic of complete literacy.

Speaking at the Second All-Russia Congress of Politprosvet (political education departments), V. I. Lenin said: "... it is not enough to abolish illiteracy, it is necessary

to build up Soviet economy, and for that literacy alone will not carry us very far. We must raise culture to a much higher level".[4]

In the Ukrainian SSR, as in the Soviet Union as a whole, the number of specialists with higher and specialised secondary education is steadfastly growing. In 1979, in the Republic there were 2,766,000 specialists with higher education and 5,041,000 with specialised secondary education. During the nine years alone since the 1970 census, the number of persons with higher and specialised secondary education increased by 7,200,000, or 1.4 times, and 7 times as against the 1939 census.

Workers engaged in the national economy have a high level of education. From 1970 to 1979 the number of specialists with higher and specialised secondary education increased from 668 to 813 per 1,000 engaged. Among all working people the share of specialists with higher, specialised and general secondary education increased from 37 to 57 per cent. Now every fourth out of them is a specialist either with higher or specialised secondary education. The share of the working population with incomplete secondary education decreased from 30 to 24 per cent, while those with primary education, from 23 to 16 per cent and those who have no initial education, from 10 to 3 per cent.

From 1939 to 1979 the share of the working people with higher education among the urban residents increased 4 times and that of the rural residents – 6.2 times.

In the Republic, as in the Soviet Union as a whole, the task of great historical significance has been successfully resolved: in all spheres of social life factual equality of men with women is ensured in practice.

This is convincingly evidenced by the development of education among women. According to the last census women made up 49 per cent of persons with higher education and 58 per cent of those with specialised secondary education.

Within the period from 1939 to 1979 the number and share of women with higher and secondary education was growing at a faster rate than that of men, i. e. 5.8 and 4.8 times, respectively. As a result, the levels of education

[4] V. Lenin, Coll. Works, Vol. 33, p. 74

Education Level of the Ukrainian SSR's Population
(according to census)

	Persons with education per 1,000 residents		
	Higher and secondary (complete and incomplete)	Including	
		Higher	Secondary
Total population from 10 years and over			
1939	120	8	112
1959	373	21	352
1970	494	40	454
1979	630	65	565
Engaged population			
1939	139	14	125
1959	438	30	408
1970	668	61	607
1979	813	96	717

between men and women constantly draw nearer, and among the working men and women the number of persons with higher and secondary education is approximately equal to comprise 825 and 800 per each thousand, respectively. Today, a multithousand army of highly skilled workers, collective farmers and intelligentsia of the Ukraine is successfully embodying into life a magnificent programme for socio-economic development of Soviet society mapped out by the Communist Party.

The more than sixty year's history of development of our country is a graphic proof of triumph of the CPSU Leninist national policy. The realisation of this policy as well as the creation of national statehood of the formerly oppressed peoples was based on the "Declaration of Rights of the Peoples of Russia" which was adopted in the first years of Soviet power. The working people of the Ukrainian SSR, where more than one hundred of nations and nationalities live, also enjoy equal rights, being united by common vital interests and a common goal of building communist society. Almost three quarters of the Republic's population are the Ukrainians. They are

one of the largest nations in Europe, being the most numerous nation of the Soviet Union after the Russians. In 1979, as compared to 1970, the number of Ukrainians in the Republic increased by 1,200,000 or by 3.4 per cent. During the same span of time the number of working people of other nationalities residing in the Ukrainian SSR also increased.

Ukrainians live in all the Union Republics. In particular, they number 3,700,000 in the Russian Federation, 898,000 in the Kazakh SSR, 561,000 in the Moldavian SSR, 231,000 in the Byelorussian SSR, 114,000 in the Uzbek SSR, 109,000 in the Kirghiz SSR, etc.

In a socialist society all conditions are created for free development of national languages. According to the last census, an overwhelming majority of the Republic's population (32,900,000) consider Ukrainian as their native tongue.

The Russian language is instrumental in bringing closer the cultures of nations and nationalities. Addressing the participants in the All-Union scientific-theoretical conference "Russian – is the Language of Friendship and Cooperation among the Peoples of the USSR", which was held in May 1979, L. I. Brezhnev, General Secretary of the CPSU Central Committee, wrote: "... Lenin's dream – to provide such conditions that every citizen of our country could have an opportunity to learn the great Russian language – is being successfully realised".

According to the 1979 census, almost 20,000,000 inhabitants of the Republic pointed out that they had mastered Russian freely to use it as their second tongue. But in general the number of people living on the territory of the Ukrainian SSR who freely speak Russian, exceeds 35,000,000 people.

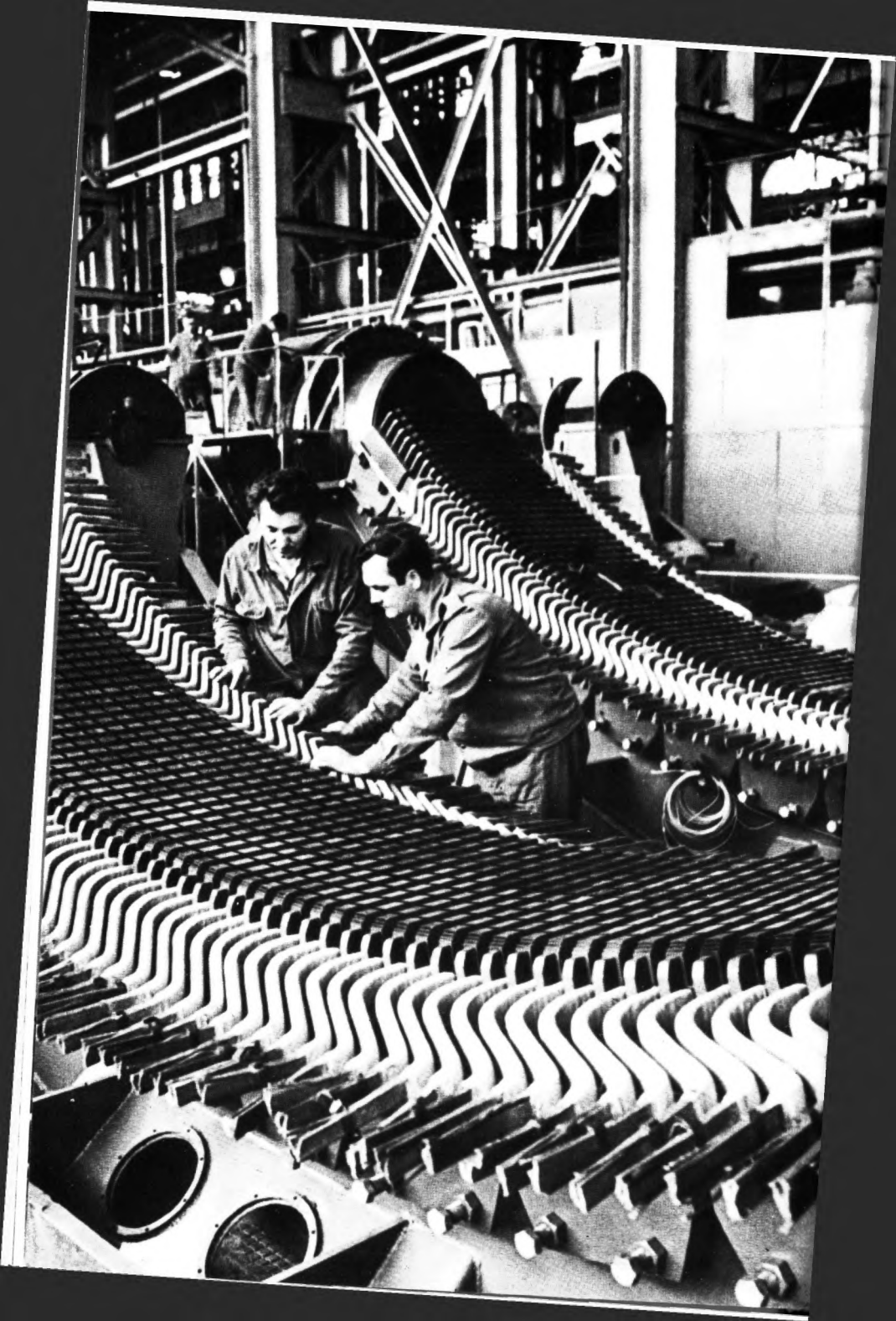
The labour of the Soviet people, free from exploitation, is a source of growth of social wealth, well-being of the people, and of every Soviet citizen. For many years the Soviet Union has no unemployment. The Soviet citizens' right to work is legally registered in the Constitution of the USSR and is ensured by the socialist system of economy, steady development of productive forces, vocational training, improvement of skills, and development of the systems of vocational guidance and job placement.

Engagement of the Republic's population is constantly growing. During the period between the last two censuses the number of those engaged in social production increased by 11 per cent. The number of dependants in the families has diminished considerably as a result of their involvement in the national economy. Over 75 per cent of all those engaged work in the sphere of material production and more than 20 per cent, in the non-productive sphere. And the share of the latter is continually growing, especially in the field of education, science, arts, health protection and everyday services. This is one more evidence of the constant care of the Soviet State of a further raising of the cultural level of the population, improvement of living conditions of Soviet people and strengthening of their health.

All this is a tremendous advantage of our socialist system, while in the capitalist countries opposite processes are observed. Thus, from 1970 to 1979 alone, the number of unemployed in the developed capitalist countries more than doubled to exceed 15,000,000.

In the Soviet Union a most comprehensive system of social insurance of the working people has been developed. Large sums are allocated for students' stipends. Now over 9,000,000 people in the Republic are maintained by the State. These are chiefly pensioners as well as students of technical vocational colleges, of boarding schools, residents of old people's and invalids' homes, etc. In 1979 there were 10,200,000 pensioners in the Republic. Many of them continue to work passing on their experience to the new generation. This is the way the Land of Soviets takes care of both the rising generation and of those who, by their labour, contribute to the continuous development and flourishing of the Socialist Homeland.

Industry



The 26th CPSU Congress emphasised that the main prerequisite for solving all tasks of the national economy, both in production and social spheres, is the development of heavy industry, first and foremost, of its key branches such as fuel-and-energy, metallurgical and chemical.

The foundation of the industrial development of the Ukrainian SSR is **metallurgy** which is the main basis for developing the metal working and engineering industries, transport, construction and other branches. The intensification of the economy, raising of the efficiency of production and quality of work demand that the output of metal be increased and the metal products adequately perfected. During 1976–1980, as compared with the previous five-year plan, the output of steel in the Ukraine increased by 20.4 million tons, the production of commercial iron ore, by 28 million tons while that of finished rolled stock, by 9.4 million tons. During 1976–1980 the production of steel pipes increased by 5.4 million tons, the overal increment of the production being attained due to raising the labour productivity. Accelerated rates of developing metallurgy contribute largely

to the build-up of the Republic's industrial potential and simultaneously provide for a further structural improvement of the single national-economic complex of the USSR.

The Republic's industrial potential was also enhanced by putting into operation new productive capacities, by further improving the machines and equipment, technologies as well as by spreading socialist emulation. In the 10th Five-Year Plan period the following capacities have been put into effect: for the production of pig iron – 2.3 million tons, of ferrous rolled stock – 2 million tons, of steel – 8.4 million tons, and of steel pipes – 300,000 tons. The continuous steel casting installations with the total capacities of 3 million tons were also put into operation, which saved up to 12 per cent of metal.

The output of the oxygen blast open-hearth steel has also been increased. Its share is 90 per cent of the total steel smelting. The production of converter steel has risen up to 96 per cent.

The tasks of paramount importance have been set before the Ukraine's metallurgists by the 26th CPSU Congress to increase the production output. All untapped reserves should be used in the 11th Five-Year Plan period. The main lines of the development of the Republic's metallurgy are those of radically improving the quality and of increasing the number of efficient types of metal production. For the 11th Five-Year Plan 20 complex programmes for developing this branch of industry have been worked out including all problems from the preparation of varied types of raw materials and introduction of new technologies to the improvement of supplying the national economy with the most economic types of metal production. The questions of mechanisation and automation of production processes as well as the problem of better utilisation of labour resources have been included in special programmes. The gross output of industrial production in the ferrous mettalurgy will increase by 11.3 to 13.6 per cent in 1981–1985. The output of finished rolled stock of ferrous metals will rise by 14 to 16 per cent, the range of rolled products being expanded. It will be necessary to master the production of over one hundred cold roll-formed and hot roll-formed sections, increasing the production of pipes by 7.6 per cent.

The production output increment will largely be ensured by putting into operation new, more elaborated productive capacities, which will result in increasing the mining of iron ore by 4.5 million tons, and the production of steel pipes by 56,000 tons. During the 11th Five-Year Plan such most important projects of ferrous metallurgy are to be constructed as the oxygen-converter shop at the Dniprovsky plant named after F. Dzerzhinsky, the "3,000" steel plate mill at the Zhdanov works named after Ilyich, the medium-section mill at the plant named after Petrovsky, and others.

A task of paramount significance in metallurgy is to improve the quality of production, i. e. to manufacture products with the State quality mark.*

Thus, in ferrous metallurgy the share of products with such a stamp comprises one-fifth as against 1.6 per cent in 1976.

An example of active drive for improving the production quality is set by the Donetsk metallurgical works named after V. I. Lenin. It produces more than 130 grades of steels and 300 rolled sections of various dimensions. During the 10th Five-Year Plan period the share of alloy and low-alloy steels used to manufacture most reliable and durable machines increased from 51.5 to 70 per cent of its total output. Each ton of such a metal replaces a ton and a half of ordinary steel. The quality of products made from these steels is also improved. In particular, the reliability of pipes produced from the Donetsk metal has considerably increased. The engine builders from Yaroslavl have increased the service life of engine shafts 2-fold. The introduction of these metals at the Volzhsk automobile plant in Tolyatti makes it possible to ensure an annual economic effect of up to 150,000 roubles. All these achievements are the result of industrious labour of the whole work collective of the Donetsk metallurgical works named after V. I. Lenin, of its public organisations, of an efficient use of the latest achievements of Soviet technology.

Among the enterprises of non-ferrous metallurgy of the Republic an important role is played by the Zapo-

* The State quality mark has been introduced to designate mass-produced products of the highest quality.

rizhya integrated titanium-magnesium works. This integrated works is a real academy for the country's titanium industry as a whole. The pledge of success of its work collective lies, first of all, in the creative attitude to the technical perfection of the production, in the proper labour organisation, as well as in spreading socialist emulation. During the 10th Five-Year Plan period the enterprise introduced more than 25,000 innovations which yielded the economic effect in excess of 10,000,000 roubles. Half of these innovations were developed by scientific associates of the enterprise among whom there is one Doctor and 27 Candidates of Sciences.

An important trend for raising the quality of metal products is the application of heat-strengthening treatment of the rolled stock. This progressive method of treatment was developed for the first time as back as the 1940s with the participation of the Institute of Ferrous Metallurgy (in Dnipropetrovsk). The rolled stock strength obtained by using this method of treatment is increased by 2.5 times while the saving of steel is 50 per cent. That is why the target for increasing the rolled stock output by using heat-strengthening treatment has been set in the decisions of the 26th CPSU Congress as one of the most important tasks for developing ferrous metallurgy.

The "Krivorizhstal" iron-and-steel works in Kriviy Rig, alongside with other enterprises, is the Republic's basic enterprise for manufacturing heat-resistant rolled stock. In the past ten years the introduction of this method saved 54,000,000 roubles for the national economy.

One of the characteristic features raising the quality and increasing the output of efficient types of metal products is the utilisation of special-purpose programmed control. The ferrous metallurgy enterprises together with the Academy of Sciences of the Ukraine have developed the Republic's special-purpose complex scientific and technological programme, named "Metal", for 1981–1985. The implementation of this programme will save about 2 million tons of metal in 1985.

The successes of metallurgy directly depend on the cooperation of the mining and engineering industries. That is why in the Guidelines for the Economic and Social Development of the USSR for 1981–1985 and the Period Ending in 1990 a task has been set "to provide an acce-

lerated development of the raw materials base for ferrous metallurgy". The Ukrainian SSR takes a leading place in ore mining in the Soviet Union. During 1976–1980 alone its extraction increased from 123.3 million tons to 126 million tons. Suffice it to say, that the commercial iron ore extracted in Kriviy Rig exceeds that mined in the USA almost by 1.3 times.

In the Republic's mining industry new capacities have been put into operation for the extraction of 47 million tons of iron ore, for the production of 14.2 million tons of iron ore concentrate.

The capacities of the Severny iron ore concentration plant in Kriviy Rig have been increased considerably after commissioning its second line. It is important to note that its capacities were being built up when the plant was under construction. During the 10th Five-Year Plan this enterprise extracted 162 million tons of iron ore, produced 68 million tons of concentrate and over 40 million tons of pellets.

At the Republic's mining enterprises the processes of handling ore and rock have been fully automated. To control technological processes, highly efficient automated systems have been developed and introduced here.

The perfection of technological processes in the mining industry is also exercised in the 11th Five-Year Plan period, which will provide for substantial improvement of the indicators of the quality of work in this branch of industry. Thus, within 1981–1985 the open-pit mining of raw iron ore in the total volume of ore extraction will increase from 82.9 to 86 per cent while the production of high quality iron ore concentrates with an iron content of 65 per cent and over will increase from 44.3 million tons to 50 million tons.

Under conditions of the scientific and technological revolution the ties of metallurgists with machine builders and scientific workers have been acquiring special significance. Highly was praised the experience of cooperation of a number of institutes and laboratories with the work collectives of the Uralmash, Novokramatorsk, Cherepovets metallurgical works and other enterprises. By pooling their efforts they considerably reduced the weight of machines and units. Also, of great importance is the assistance of machine builders who construct more sophisticat-

ed machines and equipment for the Soviet metallurgical industry.

Though the production of metal is being continuously increased, the national economy requirements are not fully met as yet. "We will, of course, put into operation new metallurgical plants", underlined L. I. Brezhnev at the 26th CPSU Congress. "But there is also another way of overcoming the shortage of metal – the more competent and fuller utilisation of what is produced". That is why a rational utilization of metal is the task of paramount state significance for whose solution it is necessary that the most up-to-date achievements of science and technology as well as advanced experience be introduced into production.

The key branch of the national economy is industrial engineering. Among the branches of industries which ensure the realisation of scientific and technological achievements and ensure the introduction of new equipment and technologies into the national economy, a leading role is played by engineering.

"The cornerstone of scientific and technological progress", as L. I. Brezhnev emphasised at the 26th Party Congress, "is the advancement of science. But it is **engineering** above all that can fling open the doors to the new. Everything novel created by scientific and technological thought has to be assimilated without delay by engineering and embodied by it in highly efficient and reliable machines, instruments, and production lines".

Engineering as a leading branch of the Republic's industry was created during the years of Soviet power as a result of realising socialist industrialisation. Especially high were the rates of development of its branches such as machine-tool industry, heavy and power engineering, transport and agricultural engineering. In the 1970s alone the output of engineering and metal working increased by 2.6 times, including instruments by 3.3 times and computing machines by 12.2 times.

During the 10th Five-Year Plan period work collectives of our Republic made a considerable contribution to the development of the country's engineering. This became possible due to a powerful metailurgical base, a high level of development of power energetics and transport, a sufficient number of skilled workers, technicians and

engineers, a considerable scientific and technological potential, as well as close ties between the work collectives and scientists. As a result, the share of the Republic's enterprises in the all-Union production of machines, equipment, instruments and other appliances constitutes over 20 per cent.

The Republic's engineering production grows at considerably higher rates than the industry as a whole, which improves the branch structure of the national economy. The share of engineering and metal working increased in the total volume of industrial output from 24.4 per cent in 1975 to 28.8 per cent in 1980, and in 1985 it will reach 32 per cent. In conformity with the decisions of the 26th CPSU Congress during the 11th Five-Year Plan period the Republic will give priority to the development of power and chemical engineering, the electrical industry, machine-tool building and instrument making, as well as the manufacture of machines for livestock breeding. In particular, during 1981–1985 the production of large electric machines will increase by 20.9 per cent, power transformers – by 22.3 per cent, instruments and means of automation – by 29.5 per cent, computing machines – by 49.2 per cent, agricultural machines – by 26.7 per cent. The Voroshilovgrad diesel locomotive works will be modernised, and new, advanced equipment installed. It is planned to put into operation the first lines of the Ivano-Frankivsk heavy press plant and of the Uzhgorod electric engine works. Especially high rates of development are provided for the machine-tool building industry, instrument making and engineering for the light and food industries. A further growth of rotary coal-winning and agricultural engineering is also promoted.

Machine-tool building is the cornerstone of engineering. By accelerating scientific and technological progress, the workers of this branch of industry were the first in the world to construct an automated plant for manufacturing automobile pistons: an automated shop for the production of bearings, they mastered the manufacture of machine tools with programmed control, highly precise machine tools for instrument making, and unique equipment for heavy and power engineering; they also started a mass production of tools with synthetic diamonds and developed new types of metal-cutting equipment of lighter

weight, etc. The Republic's scientists and machine-tool builders take an active part in all this.

Under the 11th Five-Year Plan creative collectives of the machine-tool building industry will have to develop 400 radically new types of equipment which will provide for a qualitatively higher technological level and production efficiency, as well as a rational utilisation of metal.

Many Ukraine's enterprises take the lead in the development of engineering. In particular, this is the Dnipropetrovsk heavy press plant whose experience was highly valued by the CPSU Central Committee. Making use of the latest Soviet achievements in science and technology, the manufacture of hydraulic presses with programmed control was mastered here, which makes it possible to press large, net-size forgings, saving up to 30 per cent of metal.

Engineering accelerates scientific and technological progress, first of all, by developing new equipment. During 1976–1980 scientific and research institutions, industrial amalgamations and enterprises of the Republic developed about 4,000 types of new machines, equipment, instruments, means for automation, and computers.

Among the efficient types of the new equipment there are complexes of machines for vertical seam coal-winning. The Khartsyzsk pipe works has developed new technologies for manufacturing pipes, 1,420 mm in diameter, made from special grades of steels. Workers of the "Tochelectropribor" amalgamation and scientists of the Polytechnical Institute in Kiev are the authors of an instrument for measuring corrosion rate. In great demand among the consumers are mini-type computers of the third generation. Electronic computing machines are a new type of production of the Kiev Electronmash amalgamation. The work collective of this enterprise is the first in the country to manufacture computers which were issued the State quality mark. For mastering the development of the third generation computers a group of specialists from this enterprise was awarded the Republic's State Prize. It is worthy of note that over the past five years the work collective of the enterprise has doubled the production output without expanding production areas.

At the end of the 10th Five-Year Plan the first line of the Republic's automated system for plan computations

was put into operation. The computing centres of Moscow, Kiev and Riga have been united to form a single system, which is a practical step on the way to create the all-Union automated system for collecting and processing information, to be used in accounting, planning, and management.

A considerable contribution to accelerating scientific and technological progress has been made by the working people of the Republic's electrical industry. In particular, by the end of the past five-year plan the proportion of products with the State quality mark manufactured by the Ukrelectromash Amalgamation rose to 84 per cent. Here, for the first time in the Soviet Union, the production of asynchronous electric motors of a single series including more than 11,000 modifications has been elaborated. The weight of the motor is sharply reduced, it consumes 25 per cent energy less than the previous types. As a result, in 1979 alone the economic effect for the national economy was 38.5 million roubles.

A characteristic feature of the engineering development is the introduction of systems of machines to form a single technological cycle. Such systems yield the greatest economic effect for the national economy. In this respect, transfer and production lines have been acquiring particular significance. During 1976–1980, 12.500 such lines were put into operation, 8,700 shops, sections and enterprises were transferred for large-scale mechanisation and automation.

The Ukraine's machine builders have to solve important tasks of accelerating scientific and technological progress which were set by the 26th CPSU Congress. Under the 11th Five-Year Plan over 4,600 new types of industrial products are planned to be produced, 8,400 shops, sections and enterprises fully mechanised and automated, 11,000 transfer and production lines be put into operation. It is planned to ensure two-thirds of the increase of labour productivity in industry due to raising the technological level of production.

The Republic's work collectives purposefully raise the level of mechanisation of production. In the 10th Five-Year Plan period the number of automatic and semi-automatic self-contained equipment stood at 180,000 units. At the industrial enterprises there are 11,300 units of

equipment with programmed control half of which are machine tools and over 400 are industrial robots.

Spreading the initiatives of Kharkiv machine builders and scientists, approved by the Central Committee of the Communist Party of the Ukraine, is very conducive to the accelerated development and introduction of new equipment. The Board for promoting accelerated scientific and technological progress of the Kharkiv Regional Party Committee has worked out a "Comprehensive programme for raising the technological level and efficiency of production, for providing economic effect and high quality of products manufactured by the machine-building enterprises of the Kharkiv region". Due to the realisation of this programme in the 10th Five-Year Plan period the enterprises of the region received 90 per cent of increment of the output with an economic effect of 84,000 thousand roubles. In conformity with this programme, for example, about one hundred "Bulat"-type machines have been introduced at the enterprises of Kharkiv and the Ukraine. These machines increased durability of cutting tools 3–6–fold.

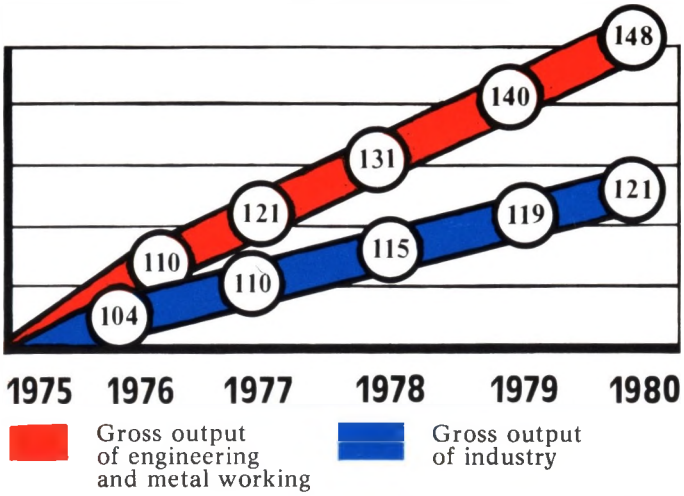
In Kiev valuable experience has been amassed in mastering machine complexes, in developing and embodying special comprehensive programmes to organise exemplary shops, sections and enterprises. Five such programmes are being realised now. They include organisation of model tool-making, forge and foundry processes, as well as shops and sections where machines with numerical programmed control will be used.

One of the main tasks set before the machine builders is a further improvement of conditions, content and character of labour of workers in all branches of the national economy.

In the Republic as a whole, from 1976 to 1980, the manual labour of 300,000 workers was replaced by mechanised and automated processes. This became possible due to an active participation of machine builders in the realisation of 35 comprehensive programmes for reducing manual labour, worked out by the Ukraine's Gosplan (Republic's Planning Committee) together with ministries and departments.

Of special importance for the development of engineering is rational utilisation of metal. The Republic's work

Growth Rates of Ukraine's Gross Output in Industry, Engineering and Metal Working in the 10th Five-Year Plan period



collectives have achieved certain successes in this. Thus, the consumption of ferrous rolled stock per unit of social production is reduced.

In the final year of the 10th Five-Year Plan period the coefficient of metal utilisation in engineering achieved 0.735 while that at the Novokramatorsk machine building plant was 0.79 – the highest for this branch of industry.

One of the directions for saving metal is to employ advanced methods of its processing, to replace cutting by pressing, etc. Perfecting the methods for machining metals, innovators at the Kiev "Tochelectroprilad" production amalgamation, for example, have developed seven automatic machines for cold heading of parts. Two such machines alone replace 120 lathes. This method provides for complete elimination of metal wastes. The method for plasma-mechanical treatment of parts raises labour productivity 4–15-fold. It has been proposed by the E. O. Paton Institute of Electric Welding in Kiev. Now this method is used at enterprises in Kiev, Zhdanov and other cities of the Ukrainian SSR.

Work collectives of machine building enterprises and amalgamations of the Ukraine channel their activities to enhance the efficiency of production and the quality of work. Quite a number of the Republic's advanced work collectives set examples of highly efficient work. Among them is the collective of the Sumy machine building amalgamation which was the first to employ a comprehensive system of controlling the efficiency of production. Here a specific certificate for the socio-economic development of all industrial sections has been introduced which makes it possible to determine the contribution of every industrial section to raising the efficiency of production.

There should be specially noted a great significance of metallurgical and engineering enterprises in increasing the output of consumer goods. As L. I. Brezhnev emphasised at the 26th CPSU Congress: "The programme for expanding consumer goods production and services outlined in the Guidelines assigns a big role to the heavy industries. They produce more than half of the consumer goods other than food".

This applies in full measure to the metallurgical and engineering enterprises of the Ukraine. In conformity with the tasks set for the 11th Five-Year Plan they have taken the course for a considerable expansion of the variety and the quality of mass production goods.

The Ukrainian SSR's Fuel and Power Complex. The Soviet Union possesses the world's largest fuel and power complex. It yields almost one-fifth of the world power output. The Soviet Union is the only industrial state in the world whose national economy is fully self-reliant in terms of its own fuel and power resources.

The fuel and power complex is an aggregate of the enterprises, plants and installations designed to produce and reprocess primary fuel and power resources, to convert and deliver them to consumers for further utilisation. The basic task of the fuel and power complex is to meet the country's requirements in high quality power.

The development of the fuel and power complex depends largely on the scales, structure and rates of growth of the country's national economy. A further uplift of the fuel and power complex is greatly influenced by such branches as power engineering, ferrous and non-ferrous metallurgy, the chemical and construction industries.

The drive to raise the efficiency of social production is most closely related to the development of the fuel and power complex. It is clearly seen, first of all, from the fact that the growth of power available per worker is one of the main conditions for raising labour productivity.

During the past decades the country's fuel and power balance was formed at a continuous increase of the share of oil and gas, and the decrease of the share of coal, peat, shales and firewood in the total structure of fuel production. For example, the share of oil products increased from 30.5 per cent in 1960 to 45.7 per cent in 1978 whereas the share of coal decreased from 53.9 per cent to 27.2 per cent, respectively. These changes in the structure of the fuel and power balance made it possible to gain time to accelerate the development of the chemical and other power consuming branches.

Nowadays a necessity has arisen and possibilities have been developed to effect a turn and reorientation in developing the fuel and power complex branches. As compared with the 1980s, as L. I. Brezhnev said at the 26th Party Congress "... the task of improving the structure of the fuel and power budget is becoming ever more topical. It is necessary to reduce the share of oil as fuel".

A gradual reorientation of the Republic's fuel and power budget for utilising coal, whose geological deposits allow to develop its mining to meet the increasing needs in power sources, will lead to the cost reduction for transporting oil and gas from the remote deposits of the country's Eastern and Northern regions and to the expansion of the output of the products for which oil is the initial raw material. In perspective the Republic's fuel and power complex will chiefly be developing due to the utilisation of the conventional types of power sources with a gradual increase of the share of the nuclear power industry and the regenerated power sources obtained from the sun, wind and geothermal waters.

Electric Power Engineering. The USSR is persistently directing its efforts towards the electrification of the entire country, with the priority being given to the development of electric power engineering. During the past 15 years alone the production of electric power in the country has increased almost 3-fold, new power capacities for

165,000,000 kW have been commissioned. The country's electric power engineering takes leading positions in the world by such indices as unit capacities of power aggregates, voltage levels of electric power grids, specific fuel consumption, and scales of power-and-heat generation.

The Ukraine's power industry workers resolve successfully the tasks outlined by the Party and the Government in the field of both electrification of the national economy and everyday services. In 1980 the Ukraine's electric power production amounted to 236,000 million kW/h, whereas by the end of the 11th Five-Year Plan period it will have achieved 280 to 290,000 million kW/h. While in 1913 the per capita electric power production stood at 15 kW/h, in 1980 it already came up to 4,726 kW/h.

A wide application of electric power in industry and other branches of the national economy contributes to the buildup of the economic potential, further mechanisation and automation of production processes, introduction of new, most up-to-date technologies (implementation of electroslag remelting, ultrasonic and electro-chemical treatment of metals, various types of welding, etc.), as well as to the solution of other prime tasks.

In 1979 the capacity of the Republic's electric power stations was 43,673,000 kW including 3,776,000 kW produced by hydroelectric power stations. Such giants of electric power engineering as the Zaporizhya, Uglegorsk, Pridniprovya and other thermal power stations have been put into operation. At Europe's largest thermal power plants such as the Zaporizhya and Uglegorsk ones (3,600,000 kW capacity each), power aggregates are installed with power capacity of 800,000 kW per unit. At the Chernobil atomic power plant two power units have already been put into operation, each reactor consistently yielding 1,000,000 kW.

In this branch of industry efforts are directed towards further concentration of the production of electrical and thermal energy by constructing large thermal, atomic and hydroelectric power stations. This is evidenced by the fact that the proportion of the electric power stations with a capacity of 1,000,000 kW and over in the production of electric power increased from 79 per cent in 1975 to 83 per cent in 1979. A positive factor here is that

the centralisation of the production of electric power in the Republic made up 99 per cent in 1979.

In the 10th Five-Year Plan period atomic power engineering was given priority in its development. Thus, in 1980 the production of electric power at the atomic power stations increased considerably. As a result of the utilisation of atomic power, 4.4 million tons of organic fuels were saved for the national economy. The construction of large atomic power stations has been expedited, first of all, in the South-Western and Southern economic areas lacking sufficient resources of conventional energy carriers.

Great successes have been scored by the Republic's builders of hydroelectric stations. They have completed construction of a cascade of hydroelectric stations on the Dnieper. In 1980, by the 110th birth anniversary of V. I. Lenin, the last two power plants of the Dniproges-2 hydroelectric station were commissioned. The total capacity of the renovated hydroelectric giant has amounted to 1,486,000 kW. The construction of the Dniproges-2 hydroelectric station was facilitated by the building on the Dnieper of a cascade of large hydroelectric stations, by creating a big Kremenchuk water reservoir with the available cubic content of 9,000,000,000 cu m, which provided a considerable increase of continuous water flow to the shore range of the Dniproges hydroelectric station.

The Republic is building power transmission lines on a broad scale. The commissioning of the 750,000 V alternate current transmission line Donbass – Vinnitsya – Albertirsha (Hungarian People's Republic) has become a weighty achievement in this field. It is a new power bridge between the single power transmission grid of the USSR and the power systems of the European member-states of the Council for Mutual Economic Assistance. The network of such high-voltage transmission lines makes it possible to increase the intersystem transmission of a large amount of electric power.

The technological level of the power industry has been considerably raised, and the economic indices of the operation of the power systems and power stations improved. Thus, at the general-purpose thermal power stations the specific costs of equivalent fuel per rated kW/h were decreased from 355.5 g in 1975 to 347.7 g in 1979.

Technological progress in electrical power engineering depends largely on the development of power machine building. At present the capacities of largest turbine-manufacturing amalgamations (at the Kharkiv turbine plant, for example) have been considerably expanded.

Ukraine's Coal-Mining Industry. The Communist Party and the Soviet State have always paid and continue to pay much attention to the development of the coal-mining industry which has turned into one of the country's largest branches of the national economy. Since 1958 the USSR ranks first in the world as to the production of coal. The coal-mining industry occupies a leading role in supplying the national economy with solid fuel. The operation of power stations, metallurgical plants, coke-producing enterprises, etc. depends largely on the coal industry.

In 1940 the Ukraine accounted for the output of 83.8, in 1975–215.7, in 1980–197 million tons of coal. In 1979 the average per capita production of coal made up 4,099 kg. During 1976–1980 alone capacities for mining 15.3 million tons of coal a year were put into operation. Such large pits as the "West-Donbas" Nos. 16/17 and the "Zhdanov-Capital" in the Donets Basin, the "Velikomostivska" pit No. 10 in the Lviv-Volyn Basin, and others have been commissioned. The "Krasnoliman", the "Novobutovka" and other pits have been reconstructed. The tasks for the 11th Five-Year Plan period provide for the commissioning of large, highly mechanised pits with the total capacity of 24 million tons of coal a year.

In this branch of industry such processes as coal cutting, mine hauling and delivering from the working face, coal loading into railway cars are fully mechanised. Of special importance for coal-mining enterprises is large-scale mechanisation. From the beginning of the 10th Five-Year Plan period its level in the Donbas working faces rose from 40 to 63 per cent.

During the 11th Five-Year Plan period the following processes are to be mechanised: cutting coal from the seams of the capacity below 0.8 m and with the incidence angle in excess of 35°, mining coal in hard soils, as well as auxiliary labour-consuming operations done by hand. The coal-mining industry, employing underground extraction techniques has coped with the task of full automation

of operations in the working faces, i. e. without miners being constantly present therein.

The equipping of a working face with a mechanised complex of machines demands great expenses (in a number of cases they amount to 1,000 thousand roubles). The equipment cost of a complexly-mechanised working face is 6–8 times greater than that used for cutting coal by a narrow-cut coal miner provided with individual face support. Thus, it is very important to ensure maximum efficiency of the expensive equipment used.

A great contribution to the work of this branch of industry is made by special teams which take part in the movement for mining not less than 1,000 tons of coal from a face a day. In early 1981 the number of such teams was 111.

The tasks facing the workers of the coal-mining industry in the light of decisions of the 26th Party Congress are to provide an increase of coal mining, to sharply reduce the number of enterprises that lag behind, and to improve the utilisation of mining equipment. Solving this task is inseparably linked with raising the efficiency of production by increasing the face advance and enhancing the labour productivity of a miner in coal production. Of prime importance is to accelerate completion of large-scale mechanisation of working face operations, to consolidate production, technological and labour discipline. An obligatory condition for resolving the tasks set before the miners is to perfect forms of socialist emulation, to enhance its efficiency and to spread the experience of advanced work collectives.

Gas Industry. Workers of the gas industry always carried out successfully the plans set before them for extraction of gas. Supplying the national economy and people with this fuel is also being continuously improved. The length of gas pipelines increased from 20,700 km in 1975 to 26,400 in 1979. By January 1, 1980, 11.3 million appartments in the Republic had been supplied with gas, including 3.8 million in the countryside, which exceeded the figure of 1975 by 26.3 per cent and 39.5 per cent, respectively.

The production of gas is mainly concentrated in the Shebelinka gas field (Kharkiv region) which is one of the oldest and the richest gas fields in the Ukraine. Automatic

systems are introduced at gas extracting enterprises to control the processes of gas extraction and delivery. An effective means for enhancing labour efficiency is the introduction of a complex system to control the quality of drilling of gas wells. Of wide application is the scheme developed by engineers of the "Ukrburgas" association for modernised jet bit flushing, which provided for more efficient utilisation of large-bore tools, an increase of their performance by 20–25 per cent. Measures are taken for raising the quality of cementing casing strings. The 26th CPSU Congress has outlined the task for the 11th Five-Year Plan period to step up geological exploration of the Republic's territory and to provide for an increment in the production of coal, gas and oil.

The system of pipeline transport is being widely developed in the Republic. The laying of the "Soyuz" (Unity) trunk gas pipeline, which also passes across the territory of the Ukraine is a significant fact of our time. Its construction was carried out by pooling common efforts and allocations of the People's Republic of Bulgaria, Hungarian People's Republic, German Democratic Republic, Polish People's Republic, Socialist Republic of Rumania, USSR and Czechoslovak Socialist Republic. Its successful completion testifies to the further expansion and deepening of cooperation among the fraternal countries within the framework of the complex programme for socialist economic integration.

With the enlargement of the scale of production and consumption of the fuel and power resources, with the cost increase of fuel production, their economising in all branches of the national economy is becoming more and more urgent. "Whatever rates are used for developing electric power engineering", said L. I. Brezhnev, "economising on heat and energy in future will be a task of nation-wide importance".

The introduction of energy-saving equipment and perfection of production processes made it possible to considerably reduce the specific consumption of fuels used for the production of electric power, pig iron and steel, cement, and other types of products.

The main trend in economising the fuel and power resources and their efficient use is a wide implementation of the achievements of scientific and technological pro-

gress. It contemplates, first of all, the introduction to industries of the national economy of energy-saving technological processes and equipment, modernisation of the power equipment in use, as well as the application of new, progressive materials. The measures which relate to the embodiment of achievements of scientific and technological progress include: installation in the thermal power engineering of power units with the capacity of 500 and 800 MW, a wider employment in metallurgy of continuous steel casting, an increase of cement production by using dry methods, application of efficient equipment for utilisation of combustible and secondary heat energy resources, adaptation of motor transport to Diesel traction, replacement of stoves with automatic boilers in the municipal services, etc.

A great reserve for saving fuels and energy is a reduction of consumption of materials used for the manufacture of products, especially fuel- and power-consuming ones.

The measures for saving the fuel and power resources, as estimates indicate, certainly are more economical than increasing corresponding volumes of their production.

An important reserve for saving organic fuels is their replacement by electric power generated at hydroelectric and atomic power stations. This replacement can also be increased due to a more extensive use of heat, found deep in the earth, of the sun and wind power.

The work on rational utilisation of fuels and energy, as is underlined in the resolution of the CPSU Central Committee adopted in 1980, must assume mass character and become an every day matter of each Party, trade union and Komsomol organisation, local Soviets of people's deputies, as well as of each work collective.

The chemical and petrochemical industry is a complex of branches of the heavy industry, which determines the rates of scientific and technological progress, the development of chemical industry and utilisation of its products in the national economy, and also the level of supplying the people with a variety of consumer goods. Prior to the Great October Socialist Revolution, the chemical industry on the territory of the Ukraine was nothing but small factories producing items of basic chemistry, mineral fertilisers, varnishes and dyes. It should

be noted that half of these factories belonged to foreign capital. During Soviet power the chemical industry of the country, including that of the Ukrainian SSR, has turned into a mighty branch of the national economy. Utilisation of the products of the chemical industry provides for saving metals, timber and other natural materials in short supply, accelerates enhancement of labour productivity, yields materials which are not found in nature, and expands a variety of consumer goods.

The Republic's chemical industry includes 20 subbranches such as the mining-chemical industry and basic chemistry, production of chemical fibres, synthetic resins and plastic materials, plastic articles, glass-fibre materials, glass-reinforced plastics and articles manufactured from them, household chemicals, chemico-photographical industry, paint and varnish chemistry, etc. In the Republic each of these branches is represented by large enterprises which account for almost one-fifth of the country's chemical produce. The Severodonetsk chemical plant, Rozdolye and Yavoriv mining-chemical plants, Novostebnits potassium works, Kalush chemico-metallurgical plant, the "Svema" amalgamation in Shostka are giants of Soviet chemistry. Closely related to the purely chemical industry are also such branches of the national economy as petrochemical and petroleum refining, by-product coke and pharmaceutical chemistry, microbiological industry, etc.

Accelerated rates of the development of chemistry resulted in a steadfast growth of its share in the total output of industrial production. The Republic's chemical industry, as a component part of the national-economic complex, yields today one-fifth of the Union production of mineral fertilisers, one-third of aniline paint and chemico-photographical products, almost the entire volume of titanium dioxide as well as a considerable amount of other products.

In the past years the Republic's chemical industry is developing due to the construction of new and reconstruction of the operating enterprises. The Crimean sodium carbonate works, the Yavoriv mining-chemical plant, the Pervomaysk chemical plant, the Zhitomir artificial fibre factory, the Crimean titanium dioxide works and others have been put into operation.

The construction of new enterprises has made it possible not only to expand the variety of production, but also to improve the distribution of the chemical industry enterprises throughout the Ukraine. Nowadays Cherkassy and Chernihiv, Lutsk and Rovno, Ivano-Frankivsk and the South of the Ukraine have become centres of great chemistry.

The operating enterprises continue to be reconstructed, which provides for the commercial yield based on more advanced technologies. At the up-to-date plants for the production of, let us say, ammonia, with a capacity of 1,300–1,400 tons a day, the labour productivity is 7 times higher, the manufacturing cost is 30–40 per cent less, and the capital investments are two times as low as those assigned for enterprises with conventional (old) equipment. Such plants which are large modern enterprises have been put into operation at the Sumy "Khimprom" and the Horlivka "Stirol" amalgamations, at the Rozdolye and the Yavoriv mining-chemical plants, the Severodonetsk and the Cherkassy "Azot" amalgamations, at the Kalush and Dniprodzerzhinsk amalgamations, the Crimean sodium carbonate works.

Special attention is paid by the Ukrainian chemists to raising the quality of mineral fertilisers. Since their high quality contributes much to high yields of the fields, releases transport, etc. the rates are being accelerated for the production of ammonia, combined liquid fertilisers, complex and granular fertilisers. In 1985 the production of mineral fertilisers is planned to reach 26 million tons in conventional units.

The broadening of the range of articles and improvement of their quality is one of the concerns of the workers engaged in industries producing consumer goods. The number of consumer goods manufactured with the State quality mark has considerably increased: at some enterprises such goods comprised from 30 to 50 per cent while at others the figure reached 70 and more per cent.

The workers of this branch of industry work in close contact with scientists of research institutes, laboratories, scientific and production amalgamations, and of institutions of higher learning. One of such centres is the Dnipropetrovsk Institute of Chemical Technology. For 50 years of its existence the Institute has trained more

than 23,000 highly-skilled specialists. Among them are managers of the branch and of large enterprises, as well as prominent scientists.

In the Ukrainian SSR the "second twin" of chemistry, i. e. the petroleum refining and petrochemical industry is developing successfully. In 1976–1980 the average annual rates of the production increment were in excess of 15 per cent whereas the total volume of production of the petroleum refining industry considerably increased. It should be noted that 40 per cent of the production increment and 60 per cent of labour productivity were attained due to the newly built and reconstructed enterprises. At the Lviv, Kherson, Odessa, Drogobich and Nadvornyansk petroleum processing plants the labour productivity rose 2–4-fold.

Of great significance for accelerating technological progress in all the branches of the national economy is the development of the tyre and technical rubber industry. In the 10th Five-Year Plan period such giants of the branch as the Lisichansk and Bila Tserkva technical rubber plants were built, and the Dnipropetrovsk "Dniproshina" production amalgamation increased its capacities. Alongside the stepping up of the production output, its high quality was of prime concern for the work collectives. Among the best in this branch of industry are the workers of the Berdyansk petroleum and grease refinery. The enterprise is the country's biggest supplier of lubricants producing up to 130 types thereof. Half of them is developed in cooperation with scientists of the country. The refinery's products are exported to 27 countries of the world. The work collective of the Kremenchuk technical carbon plant ranks first in the country with respect to efficiency and aesthetics of the production. Practically all the products are qualified for the State quality mark.

And this list of the collectives-innovators is far from being complete. In the past five-year plan period the workers of the branch increased the output of articles measured up to the State quality mark from 15 to 45 per cent. In fact, all enterprises of the branch manufacture some types of their produce qualified for the State quality mark. The work collectives of the petroleum refining and petrochemical industries with all their hearts have welcomed the Party's call to radically improve the production

quality and to more fully use the possibilities for further raising the production output, enhancing its efficiency and quality of work.

Forestry, Timber and Woodworking Industry. In our time science and technology make quite a lot of artficial materials. But a live tree and articles made from it continue to be widely used in the national economy. Not a single natural material can rival it as to the range of application. Moreover, the further we advance the wider are the scales of its application in the life of the people. This is evidenced by the following fact: in the first quarter of our century it was considered that some 2,000–2,500 articles could be made from wood, now some 15,000–20,000 articles are manufactured from it.

Wood is the main but not the only raw material of the forest. It provides man with resins, raw materials for the production of gutta-percha, cork, yielding various fruit, medicinal plants, berries, mushrooms and fodder for livestock. Forests exert tremendous influence on the climate and water resources, on the environment, prevent soils from water and wind erosion.

In the Soviet Union the forestry is developed according to a plan, on a scientific basis. Concern for it is the nation-wide policy. The Republic's forests occupy almost 10 million hectares or 13.72 per cent of the total land area. During the years of Soviet power the forest expanses have increased by 5.3 million hectares. During the last decade alone the areas of forest plantations exceeded four times the felling areas. In recent years large forest stands have risen in the Republic's steppe regions such as Voroshilovgrad, Odessa, Mykolayiv and Zaporizhya. Annually, tracts of forests and shelterbelts are enlarged here by 4,000-5,000 hectares. In the Ukrainian SSR shelterbelts occupy 418,000 hectares. Their total length is 325,000 km. They serve to protect almost 13 million hectares of arable land. Green plantations protect not only the earth but also rivers, water storages and canals. The work collectives of the Ministry of Forestry of the Ukrainian SSR "clothed" the banks of rivers and water storages in forests which cover the total area of 78,000 hectares. The biggest stands rose on the banks of the Dniprodzerzhinsk, Kremenchuk, Kaniv water storages. The scope of these jobs is continuously growing. The

state capital investments in the development of the Republic's forestry are also being increased.

The Ukraine with its highly developed industry and agriculture, with a tremendous scope of construction work, consumes over 10 per cent of the total production of wood in the Soviet Union. This accounts for almost 38–40 million cu m of round timber. At present the Ukraine has limited reserves of mature forest stands. But the demand in timber is great. That is why timber is supplied from remote areas of our country. The timber, pulp-and-paper, and woodworking industries of the Ukraine account for 10 per cent of the Soviet Union's overall production. Under the 11th Five-Year Plan the production output is to be increased by 18.4 per cent. The Ukrainian SSR is the country's main supplier of capacitor, light-sensitive and carbon paper.

A leading place in the manufacture of most important products and articles made from wood is occupied by enterprises of the Ministry of Timber and Woodworking Industry of the Ukrainian SSR. This Ministry includes the forestry and logging, saw timber-woodworking including furniture, wood-chemical and other branches of the industry.

In the Republic much is done for the rational utilisation of wood in the national economy, for the reduction of expenses per unit of manufactured production.

New saw timber enterprises have been constructed and existing ones reconstructed to produce annually over 100,000 cu m of lumber. The largest of them are in Kostopil, Kiev, Beltsy, Korosten, Broshniv, Pereyaslav, Nadvirnyansk, Rakhiv and Chernivtsi.

There is hardly a branch of the national economy in which veneer is not used. In the Ukrainian SSR its production is developing at fast rates. While in 1965, 156,100 cu m of plywood were manufactured, in 1979 the figure mounted to 186,000 cu m. Its effectiveness cannot be argued. Suffice it to say that 1 cu m of plywood replaces 3.3 cu m of lumber.

Wood-particle and wood-fibre boards are widely used now. They are the basic materials for the furniture industry. They are also used in car building, automotive industry, construction, as well as in other branches of the national economy. In the Republic their production increased from

6,300 cu m in 1958 to 874,000 cu m in 1979. The production of modified (laminated and veneered) wallboards is also planned to be increased. The production of wood-fibre boards in the Republic rose from 1.6 million sq m in 1959 to 26 million sq m in 1979.

In the Republic the production of furniture is growing steadfastly and its quality is being improved. All this is achieved through the widely used specialization and concentration of its production. Nowadays over 86 per cent of the output of furniture in the Republic are concentrated at the enterprises of the Forest Ministry of the Ukrainian SSR. The Republic is famous for the articles of the Irshava integrated bent-wood furniture factory, the Mukacheve and Donetsk integrated furniture factories, the Artemivsk, Sevastopol, Slavyansk, Novokakhovka and Zaporizhya furniture factories, the Teresva integrated furniture factory. The furniture construction, design and quality have been considerably improved. The large-scale system for controlling the quality of production contributes largely to this. The furniture manufactured at the enterprises of the Precarpathian area, of Dnipropetrovsk, Zhitomir, Drogobych and Rovno commands a ready sale.

Also considerably enhanced is the technological level of production as the basis for improving the quality and efficiency of production, for reducing manual labour and eliminating hard, labour-consuming operations.

A continuous growth of capital investments is responsible for the branch's high rates of development, perfection of the production structure, enhancement of labour productivity. Almost 84 per cent of the allocations are channelled to the woodworking industry, 67 per cent of these for the manufacture of furniture and wood-particle boards, i. e. to the branches which are designed to meet the requirements of the people and to develop progressive technologies. The application of wood-particle boards, quest for new types of wooden materials, the expansion of substitutes of merchantable wood reduces the consumption of raw materials and contributes to decreasing labour and material resources.

The forestry, timber and woodworking industries are also developing at high rates in the 11th Five-Year Plan period. It is envisaged to step up the production of timber and wooden articles so as to meet the needs of the Re-

public's national economy. All this will be done without considerably expanding the scope of logging. The production of efficient substitutes of merchantable wood will be developed at a faster rate. There will also be increased the concentration of saw timber-woodworking production based on large-scale cooperation and more extensive specialisation, as well as on merging the enterprises. Work is carried on to considerably improve the quality of production.

The Ukraine's light industry is one of the most important branches of the national economy. Its role is great in the further raising of the living standard of the Republic's population. This branch of industry includes more than 1,215 production, scientific-and-production amalgamations, integrated factories and enterprises, which makes up 16 per cent of their total number in the industry. In the structure of the consumer goods output the light industry accounts for 26.3 per cent. In the manufacture of goods of the light industry the biggest share falls to leather footwear, clothing, and knitted goods.

A continuous growth of the population requirements in light industry goods is responsible for its accelerated rate of development, introduction of the achievements of scientific and technological progress. From 1976 to 1980 the gross output of the branch increased by 25.6 per cent. At the same time the number of the working personnel increased only by 3.3 per cent. This testifies to the fact that the branch is developing intensively. High rates of the goods production were ensured, first of all, due to the expansion and reconstruction of the existing enterprises. Their basic industrial-productive assets increased within this time almost by 35 per cent whereas the assets available per worker – by 36 per cent.

Special attention is attached to the manufacture of goods for children. The rates of manufacturing the main types of goods for children (clothes, knitted wear, footwear) were 8 to 12 per cent higher than those for the overall production output.

The Republic's light industry was developing under the influence of a number of socio-economic factors (availability of power and labour resources, proximity to the raw material sources, possibilities of further processing of raw materials, agroclimatic conditions, specific

Dynamics of Manufacture of Some Kinds of the Ukrainian SSR's Light Industry Produce per Day

Name of produce	Unit of measurement	1975	1980	1980 in% to 1975
Leather footwear	Thou. pairs	452.9	484.4	107
Hosiery	Thou. pairs	887.5	966.3	108.9
Upper knitted garments	Thou. pieces	201.2	215.8	107.3
Knitted undergarments	Thou. pieces	532.4	585.5	110
Ready-made clothing	Million roubles in wholesale prices of enterprise	9.9	12.7	128.3

historical features of the region's development, etc.). These factors bore upon the character of distribution of the light industry enterprises: they are located closer to the raw material sources, mainly in areas where the priority is given to the development of agriculture. The biggest share of the light industry output in the total industrial output is 40.4 per cent in the Chernihiv region, 26.3 per cent in Chernivtsi, 25.7 per cent in Zhitomir, 25 per cent in Ternopil, 23.4 per cent in Rovno and 20 per cent in Ivano-Frankivsk regions, respectively. The average index in the Republic is 12.3 per cent.

The production of goods of the light industry directly depends on the level of development of the raw material base. The chemicalization of the raw material base of the light industry is one of the most important trends of its development. At present substitutes for natural raw materials are used to manufacture almost 84 per cent of leather footwear, 92 per cent of hosiery, 53 per cent of knitted underwear, 41 per cent of knitted garments. The economic efficiency of using film materials and artificial leather makes it possible to reduce the manufacturing cost of the production 7–8-fold, and of the capital investments – 2–3-fold.

The further expansion of the output of goods and the advancement of its technological level in the Ukraine's light industry is realised on the basis of the mechanisation and automation of production processes, introduction of highly productive equipment, progressive technologies

and organisation of production. During the 10th Five-Year Plan period alone, out of the total sum of capital investments allocated for the light industry, 33.7 per cent were used for the technical reequipment and reconstruction of the existing enterprises. To expand the production, 66,000 units of new technological equipment were introduced instead of the obsolete machinery. Non-automatic and automatic shuttle looms are being replaced by modern shuttless, pneumatic and pneumo-needle looms. In 1980 their share in the total fleet of spinning looms was 10.3 per cent in cotton production, 19.8 per cent in flax production, 56.7 per cent in silk production and 77.5 per cent in wool production. In the knitwear production, in particular, such new technological processes are introduced as applying patterns on knitted goods by using the method of dry thermal embossing, manufacture of artificial furs on knitted warp, etc. In the footwear industry highly-efficient production lines are used to manufacture glued footwear by assembling it from prefabricated parts and units, machines for casting soles and lower parts of footwear made from polyurethane, etc. During 1976–1980, 140 fully mechanised production lines were put into operation in the clothing industry. In manufacturing articles from thermosoftening plastic materials high-frequency current and ultrasound are used for assembling their parts and units.

Alongside the introduction of new equipment, the production organisational structure is being perfected, its specialisation and concentration, cooperation and integration are being developed and deepened. Functioning in the system of the Ukrainian SSR's Ministry of Light Industry are 120 production amalgamations as against 85 in 1975. Production amalgamations and integrated factories manufacture up to 70 per cent of the total output of the light industry. This index is the highest in the pretreatment of flax, in the flax, leather, sewing, cotton and footwear branches whose amalgamations and integrated factories yield from 70 to 100 per cent of the production output. The sewing industry, for example, includes 40 production amalgamations. Most of them use one and the same technology taking into account the territorial proximity of the amalgamated enterprises. All clothing amalgamations are virtually highly specialised: the Voro-

shilovgrad and Dnipropetrovsk clothing amalgamations manufacture overcoats, raincoats and jackets; the Vinnitsya and Chernivtsi ("Trembita") amalgamations – suits; the Horlivka, Dnipropetrovsk ("Dnipro"), Lviv ("Vesna") and Kharkiv ("Kharkiv") amalgamations – dresses, the Kiev ("Kashtan") and Kramatorsk amalgamations – shirts and underwear, etc. At the same time the existing production lines have been enlarged, the experimental workshops, preparatory cutting-out processes and moisture-and-heat treatment of articles are centralised.

In the footwear industry more extensive specialisation is used for manufacturing on the production line of the footwear of one and the same kind, from one material for the top parts, by the same method of fastening, and also with respect to particular type of footwear (for sports, household wear, work, children, etc.).

Owing to the introduction into production of highly efficient, basically new equipment, progressive technology and organisation of production, labour productivity rose considerably, the variety, quality and aesthetic level of commodities improved.

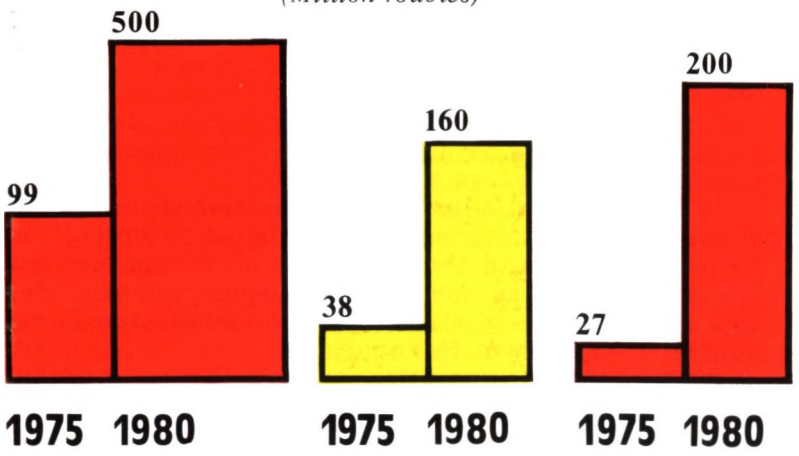
The enhancement of labour productivity accounted for almost 90 per cent of the output increment. In 1980 the share of high quality goods achieved 14.6 per cent of the total production output of the light industry. In the 10th Five-Year Plan period an average of 130–140 kinds of new commodities were manufactured a year. In particular, the variety of the clothing articles was renewed by 63 per cent, of knitwear by 51 per cent, and of footwear by 72 per cent.

Spreading the initiative of the advanced work collectives to release each second or third article with the State quality mark led to the increase of the production of high quality goods. This initiative was supported by almost 150 enterprises of the Ukraine. The greatest successes were achieved by the work collective of the Kiev "Kiyanka" knitted-goods factory where the share of commodities qualified for the State quality mark is 55 per cent. There are some shops in the factory whose entire products are qualified for the State quality mark.

The drive for raising the quality of the produce yields best results when it embraces the enterprises of a given production cycle – from those extracting raw materials to

Manufacture of Light Industry Produce Qualified for State Quality Mark or "N" (short for New) Index by Enterprises of Republic's Industrial Amalgamations

(Million roubles)

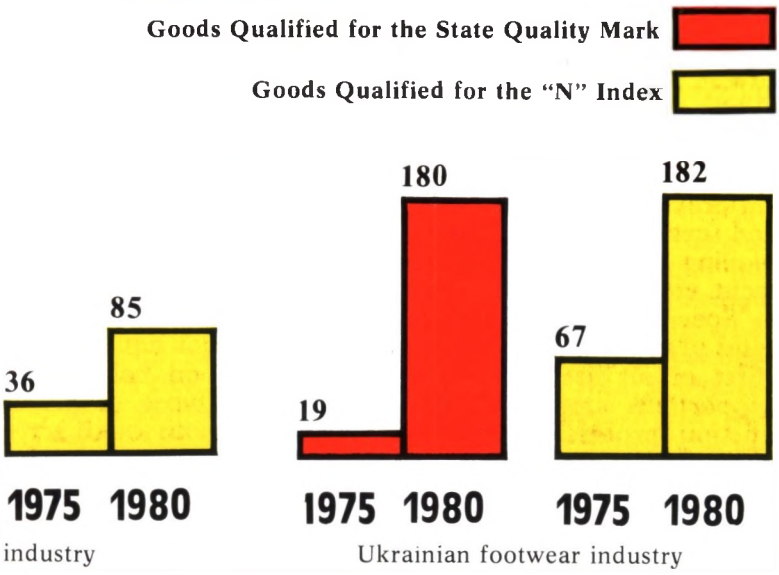


Ukrainian clothing industry Ukrainian knitted-goods

those manufacturing the finished products. That is why great significance is attached to the socialist emulation between accessory manufacturers under the motto "Made well – sold well". Almost 30,000 young workers engaged in the light industry enterprises upgrade their skill through special training courses.

The work collectives of the branch have broadly developed socialist emulation for the rational utilisation ot raw materials, perfection of the structural designs of the articles, better utilisation of the production waste. It made it possible to save hundreds of tons of fibres and yarn, of leather raw materials, millions of kilowatt-hours of electric power, and scores of thousands of tons of fuels. As a result, a great amount of fabrics, ready-made clothing and knitwear goods, leather footwear and hosiery was manufactured in addition to the plan.

During the 11th Five-Year Plan period the development of the branch is determined by augmenting the scope of the gross output absolute increment and by raising labour productivity. It is planned to increase the output of goods by 1,600–2,000 thou. million roubles whereas the produc-



tion of everyday-use articles and household appliances will increase by 1.4 times. Special attention is being paid to increasing the production of goods which are in high demand, and namely, of cotton, linen, silk, worsted fabrics and ready-made clothing from these materials, knitted underwear and outer clothing, as well as a wide range of goods for children. The enhancement of the production efficiency will be realised through the introduction of most up-to-date machines and equipment, creation of new labour tools, utilisation of new types of raw materials, improvement of structural design of the equipment, machines and mechanisms, replacement of physically and morally obsolete equipment by new, more efficient machinery. In the textile industry, for example, modern equipment and automated production lines will be widely introduced whose characteristic features are a single production process cycle in combination with high transfer rates. Thus, the introduction of the БД-200 type pneumomechanical spinning looms whose chamber speeds are 30,000 and 60,000 rpm will increase labour productivity by 2.5–3.5 times; the use of multi-shed machines with

programmed control will reduce labour expenditure 2–3-fold. The introduction of basically new equipment in clothing production, continuous-type automatic and semiautomatic machines, orienting equipment and machines with numerical programmed control, microlaser equipment for cutting-out operations, etc. will make it possible to manufacture goods based on an uninterrupted technological process. In the foot-wear industry semiautomatic lines and sections, chemicalised technological processes, unified hauling appliances for continuous-type production equipment, etc. are planned to be used on a large scale.

Special attention is concentrated on increasing the rates of renovation of machines and production equipment (first of all used for textile production), on balancing proportions among certain branches and types of production processes, providing enterprises with auxiliary materials, on complex mechanisation and automation of hard and labour-consuming operations, including auxiliary processes.

The production of modern equipment and technology will contribute to raising the level of labour mechanisation in the light industry. This will ensure a steadfast growth of labour productivity and create the necessary prerequisites for a more efficient utilisation of labour resources.

In future the growth of the light industry output will chiefly be provided owing to the expansion and reconstruction of the existing enterprises, introduction of new equipment, technologies, raw materials, efficient utilisation of labour resources, of productive capacities and equipment.

Ukrainian SSR's Food Industry. The Republic's food industry is a complex of highly developed branches producing varied food stuffs. The industry comprises more than 70 branches of production. The Ukraine's food industry in the all-Union division of labour is determined, first of all, by the production of sugar, oil, canned fruit and vegetables, meat, dairy, wines, alcohol, bread, salt, etc.

With respect to the workers engaged, the food industry ranks third among all the branches of industry. During 1976–1980 the overall gross output of the industry increased by 20 per cent. The highest rates of production

were observed in the sugar, canned food, starch-and-treacle, brewage, confectionery, salt, oil-bearing and other branches. In 1979, as compared to 1975, the gross output of the sugar industry increased by 17.1 per cent, ethereal-oil – 29.4, salt – 18.1, starch-and-treacle – 14.2, confectionery – 9.4, and alcohol – 9.5 per cent.

In spite of certain difficulties with raw material supplies the production output in the meat and dairy industries increased as compared to 1975. High are the output rates of the produce which is in great demand among the people. Thus, the production of beef increased by 14.1 per cent, of half-finished meat products – by 51.5 per cent, of sausages – by 12.8 per cent, of canned bacon – by 2.1 times. The production of poultry meat is developing at a fast rate: while in 1975, 105,900 tons of poultry meat were produced, in 1978 this figure mounted to 119,300 tons, an increase of 12.6 per cent. The variety and quality of the meat industry produce improved considerably. The amount of the first-grade beef increased by 23 pet cent and its share in the overall production grew from 79.4 per cent in 1975 to 85.7 per cent in 1978. At the same time the production of bacon meat increased 10-fold, that of drawn poultry, by 4.7 times. Positive changes have also taken place in the dairy industry: the production of cheese including brynza (sheep's milk cheese) increased by 27.7 per cent, of dried whole milk by 16.9 per cent, and of dried skimmed milk and the substitute for whole milk by 36.9 per cent.

The expansion of production of the food stuffs which play a leading role in nourishment of the people, made it possible to improve the branch structure of the food industry. First of all, the proportion of such branches as meat, dairy, canned foods has increased. At the same time the share of the alcohol, alcoholic beverage, baking, and flour-and-cereals branches has decreased. In 1979, as compared to 1975, the production of canned foods, for example, increased by 5.8 per cent, and that of canned fruit and vegetables – by 13.4 per cent, of margarine – by 29.6 per cent, of food concentrates – by 15.9 per cent, of beer – by 4 per cent, of mineral water – by 18.7 per cent, nonalcoholic beverages – by 9.5, of confectioneries – by 14 per cent, dried vegetables and potatoes – by 26 per cent, etc.

During the 10th Five-Year Plan period 22 new, large enterprises were built in the food industry. Among them there are 3 sugar-mills, 11 baking factories, 2 breweries, 1 cannery, and 5 enterprises of the dairy and meat industry, Besides, during the same time 186 enterprises of the food industry were either reconstructed or enlarged.

The utilisation of productive capacities of the enterprises is improved. This is achieved by changing the seasonal character of production, introduction of progressive technologies, and chemical methods of processing raw materials. Complex mechanisation and automation of production as well as progressive refrigeration equipment are widely used. In 1979 alone, at the baking factories there were put into operation 10 warehouses for bulk intake and storage of flour, 28 plants for bulk storage and interfactory transportation of auxiliary raw materials, 5 lines for the production of stick-like biscuits. At the confectionery factories are introduced 5 mechanised lines for the production of high-grade candies, 50 highly efficient confectionery wrapping and prepacking machines, 2 lines for the production of candied fruit jelly and pastila.

The level of mechanisation of labour in the food industry grew by 6 per cent as compared to 1975.

The perfection and expansion of the production and technological base of the food industry make it possible not only to increase the volume of production, but also to improve its variety, gustatory and edible qualities. Now the Republic produces over 200 varieties of bread, buns and rolls. The output of dietary products, foodstuffs with varied additives to improve their gustatory qualities has been increased. To improve the qualities of foodstuffs and prolong the terms of their storage, surface-active agents and enzymes, vitamins, biologycally active and protein additives are used more extensively.

Special attention is devoted to the utilisation of proteins used as additives for producing foodstuffs. In 1978, for example, 115,300 tons of sausage products contained protein stabilisers, 26,000 tons – lactoprotein, 131,900 – skimmed milk.

At many enterprises of the food industry a complex system for the production quality control is introduced. This system is functioning now at 381 enterprises of the Ukrainian SSR's Food Ministry.

The growth of the food industry output, improvement of its quality and expansion of the range of products contribute to fulfilment of the Party's directives to fuller satisfy the people's requirements in foodstuffs. During the 10th Five-Year Plan period the consumption of the most valuable foodstuffs by the population of the Ukrainian SSR increased, including meat, milk, eggs, sugar, butter and vegetable oil. At the same time the consumption of bread, macaroni produce, flour and potatoes decreased, which testifies to positive changes in the people's nourishment.

Consumption of Basic Foodstuffs by Ukrainian SSR's Population
(per capita a year, kg)

Foodstuffs	1950	1960	1970	1975	1980
Meat and bacon	26	42	49	60	61
Milk and dairy products	172	230	311	335	329
Eggs, pieces	60	137	156	210	236
Fish and fish products	7	9.7	15.9	15.9	16.2
Sugar	12	26.9	41.4	45.4	50.4
Vegetable oil	5.3	6	7.4	8.5	9.2
Potatoes	241	174	156	143	130
Vegetables and melons	51	89	103	118	116
Bakery products	172	163	155	151	149

All these achievements became possible owing to the selfless labour of the food industry workers. Quite a number of work collectives of the branch have become winners of the All-Union and Republic's socialist emulation, have been conferred the Challenge Red Banners of the CPSU Central Committee, of the Council of Ministers of the USSR, of the All-Union Central Council of Trade Unions and the Young Communist League Central Committee.

During the 11th Five-Year Plan period it is planned to increase the food industry output by 23.1 per cent. Its assortment is to be considerably expanded due to the production of finished, half-finished foodstuffs, culinary foods, produce from potatoes, chilled fruits and vegetables as well as to the accelerated rates of production of baby and dietary foods, and improvement of the processing

and utilisation of agricultural raw materials, more widely use of progressive methods of foodstuffs production, transportation and storage. The realisation of the food programme outlined by the 26th CPSU Congress will make it possible to fully meet the requirements of the Soviet people in foodstuffs in accordance with the scientifically grounded norms.

Ukraine's Local Industry. Complementing the heavy industry, an entire complex branch of the Republic's national economy utilises locally procurable raw materials and production waste, uses the experience gained by the population in the production of traditional goods which are partially exported. The local industry is sometimes termed the industry for all because four-fifths of its total production output are most varied goods for the people and products of agriculture. The local industry makes it possible to solve a number of tasks which arise in the districts, regions and in the Republic as a whole. Its maximum share in the total production output falls to the engineering and metal working, to the light industry (sewing and haberdashery), chemical and petrochemical, woodworking and peat industries. Ever more grows the share of the production which relates to the metallurgical, radio and electrical industries.

It is understandable that the above-mentioned branches of the local industry only complement the large sections of the national economy, however in the production of many kinds of commodities it is not only a leading but also a single branch. This applies, in particular, to the production of musical instruments, visual aids for schools, etc. The branch occupies a leading place in the manufacture of kitchen utensils and covers, perambulators, household electrical and lighting equipment and haberdashery.

Considerable is also the share of the branch in the extraction of non-ore materials such as ochre, clay for majolica and pottery articles, chalk, lime, granite, etc. The industry accounts for the whole of peat extraction – about 9,000,000 tons a year.

Not long ago the industry was confined to rather small and poorly equipped factories. But now the branch has medium and even large enterprises fitted out with most up-to-date equipment. The branch has been swiftly de-

veloping since it was set up in 1965. Especially noticeable was the increment obtained in the 9th Five-Year Plan period, i. e. about 50 per cent. The growth was chiefly conditioned by technological reconstruction, specialisation, as well as by setting up new modern enterprises.

Nowadays such enterprises of the branch have been put into operation as the F. Dzerzhinsky covers factory, wind and percussion instruments factory and ironmongery factory in Kiev, peat-briquetting factories in the Chernihiv and Rovno regions, objects d'art factories in Cherkassy, Ivano-Frankivsk, Vinnitsya, Kiev, Pereyaslav-Khmelnitsky, Bohuslav and other cities, household chemicals factories in the Zhitomir region, a musical instruments factory in Chernihiv, and many others.

The high level of technological equipment of the engineering branch of the local industry, in particular, is evidenced by the fact that, based on the achievements of the Institute of Problems of Casting of the Ukrainian SSR's Academy of Sciences, a quantity production of the МДН-6 magnetical-dynamic pumps for continuous casting of non-ferrous metals was organised. The annual efficiency attained due to introducing into production of new scientific and technological developments at the local industry enterprises is in excess of 10,000 thousand roubles.

The results achieved by the local industry are largely due to the deepening of specialisation and concentration on the basis of enlarging the industrial capacities of the branch. As a result, the number of enterprises during the 10th Five-Year Plan period was reduced by one-third and the production output per one enterprise grew, on the average, over 2-fold.

Peat extraction and briquetting have turned into a well equipped branch of the local industry where seasonal character of production is practically eliminated. In the 10th Five-Year Plan period the major portion of its production (5 out of 9 million tons of peat) was channelled to agriculture, which contributed to the improvement of fertility of soils.

The Republic also manufactures musical instruments using up-to-date technological basis. These are produced by 13 factories and plants. The variety of articles is rather large and includes: 30,000 pianos, a quarter million

guitars, more than 33,000 wind and pulsative instruments a year.

The production of certain enterprises, in particular, of pianos made by the Chernihiv factory, accordions produced by the Zhitomir and bandores by the Lviv factories is well-known in the Soviet Union and is exported to many countries. The variety of articles of the branch is being expanded and the enterprises are being reconstructed.

Work collectives of the local industry have also achieved appreciable successes in improving the production quality. Annually, the local industry organises the production of 1,200 to 1,400 new commodities. These changes became possible due to the centralisation and mechanisation of auxiliary processes, especially in the field of craftsmanship, which made it possible for highly-skilled craftsmen to concentrate their efforts on creative work. Nowadays in the branch of applied decorative art alone (one of the basic branches of local industries) there are 12 merited masters of the Ukrainian SSR's folk art and over 500 artists of the higher and first class.

During the 10th Five-Year Plan period considerable changes have also taken place in the structure of the working personnel of the local industry. The number of home-workers and collective farmers engaged in fulfilling the orders of the branch in the interseason period has increased. This is one of the ways of rational utilisation of labour resources.

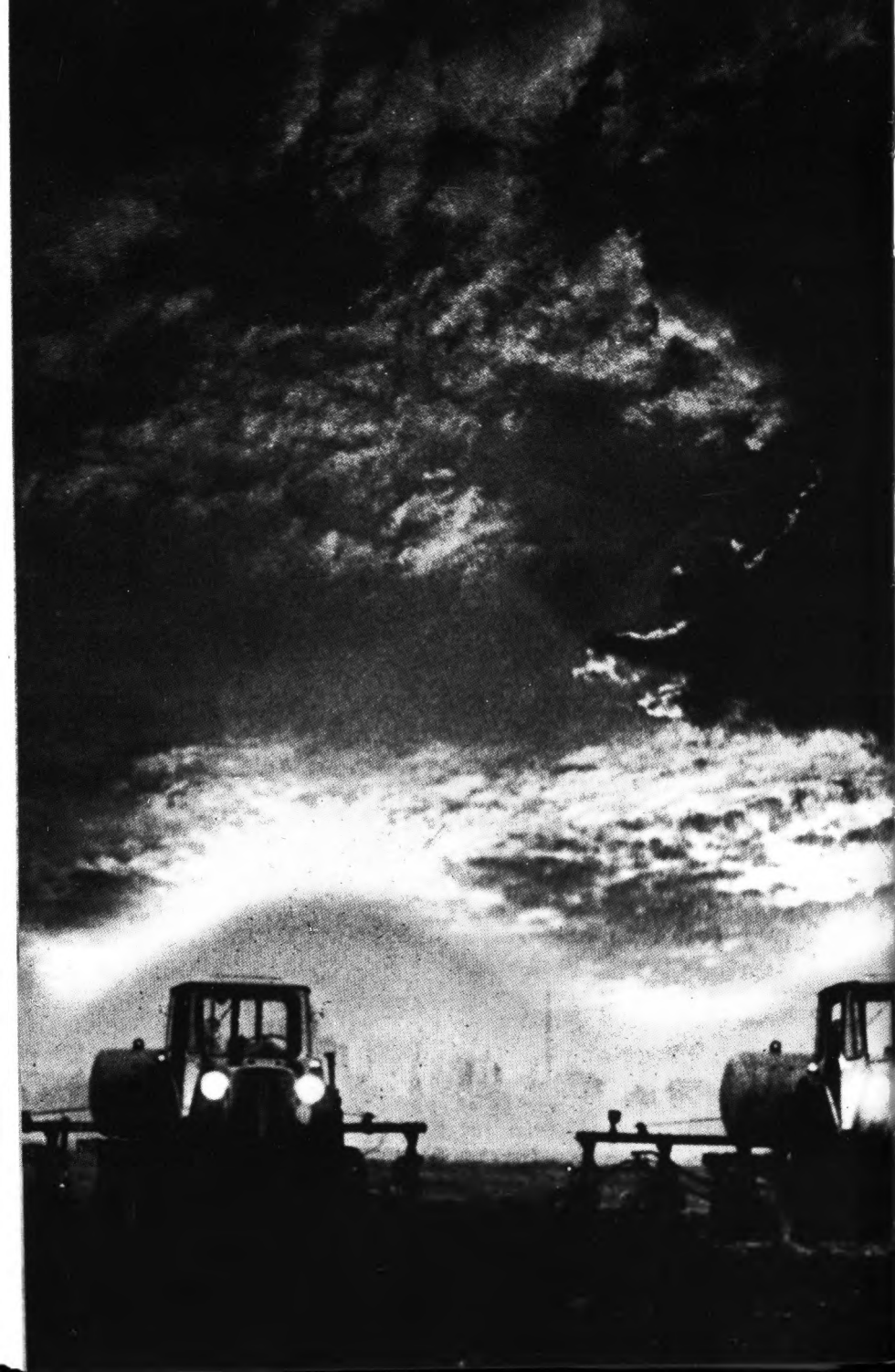
Also great is the significance of the branch in the further rational utilisation of locally procurable raw materials and the large-scale industry waste. That is why the decisions of the 25th and 26th Congresses of the Communist Party of the Ukraine envisaged a broader utilisation in the economy of both vegetable and mineral raw materials (rod, cane, clay), as well as the large-scale industry's and agriculture's waste. The branch has ensured accelerated rates of the production output from these resources (over 40 per cent). From local vegetable raw materials (rod) the enterprises of the branch manufacture almost 1,000 thousand worth of wicker furniture, over half a million of wicker basket containers, 2,000,000 sq m of cane wallboards, which saves over 20,000 cu m of round timber.

The enterprises of the branch process a considerable amount of waste of the engineering, chemical, pulp-and-paper, textile, light, food and a number of other branches of the national economy. Annually, the branch consumes over 150,000 tons of sub-standard rolled stock and waste of ferrous metals, up to 3,000 tons of waste from polymeric materials and many others. During the 10th Five-Year Plan period noticeable progress was made in the utilisation of industrial waste. The trend towards rational, wasteless production reduces markedly the raw material base of the local industry. That is why the branch pools its efforts for mastering new resources such as used materials, in particular. For example, in Radomishl a specialised enterprise for processing waste from polymeric materials was put into operation, which improved the raw materials supply of the enterprises for processing plastics. In general, the branch accounts for 10 per cent of its output manufactured from locally procurable raw materials and the industry's and agriculture's waste. This is the highest index among similar ministries of the country.

An accelerated development of our Republic's local industry testifies to the fact that its role is considerable in the USSR's single national-economic complex, whose core is the large-scale and, in particular, heavy industry. Though the local industry does not achieve the production level comparable with the powerful modern branches of the heavy industry, nevertheless both its economic and social contributions are noticeable.

НИВА

Agriculture



In order to successfully resolve the tasks for raising the people's well-being, the 26th Party Congress focused on the necessity of working out a special food programme in whose realisation a great role is assigned to the development of agro-industrial complex and, in particular, to agriculture. In the Guidelines for the Economic and Social Development of the USSR for 1981–1985 and the Period Ending in 1990 the task has been set forth for achieving dynamic development and enhancing efficiency of all the agricultural branches, increasing production and improving quality of the products, as well as continuing the course for the all-round intensification of agricultural production.

If one takes the Ukraine as an example, one can see how consistently and persistently the Communist Party implements the agrarian policy directed at the all-round development of productive forces and enhancing the efficiency of agricultural production. The Central Committee of the Communist Party of the Ukraine and the Republic's Government have mapped out measures to set up in the 11th Five-Year Plan Period the zones for the

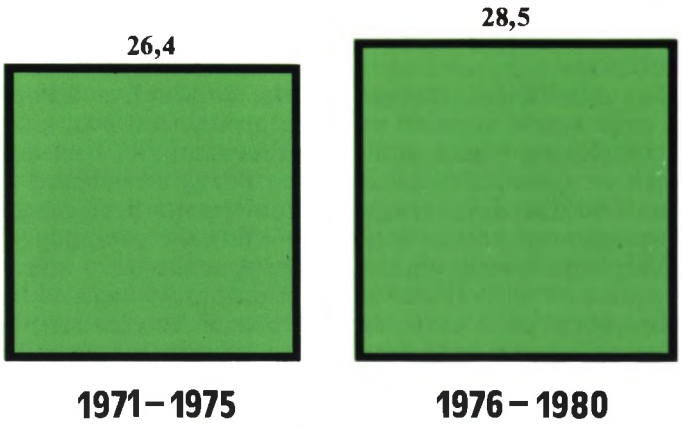
guaranteed supply of large industrial centres, especially, with milk, vegetables, potatoes and fruit. This set of measures is the most important component part of the Republic's food programme.

Translating into life the decisions of the 25th and 26th CPSU Congresses, the Republic's Party organisation firmly adheres to the course aimed at the complex solution of economic, technological and socio-political tasks. A considerable increase of capital investments contributed largely to creating the Republic's solid economic foundation and speeding up the rate of intensification of agricultural production. Between 1976–1980 over 25,000 million roubles were channelled into this branch, i. e. more than had been envisaged by the plan. In the 11th Five-Year Plan period 26,000 million roubles of capital investments are planned to be allocated for the development of agriculture.

The creation of the solid economic foundation has made it possible to accelerate the rate for solving another Party's task – the switchover of agriculture to the modern industrial basis, and accelerating of its scientific and technological progress. As of January 1, 1981 the basic production assets of the collective and state farms constituted over 43,000 million roubles, including the costs of machinery and implements amounting to 10,000 million roubles.

By the end of the 10th Five-Year Plan period over 400,000 tractors, about 100,000 grain harvesters, 315,000 lorries and many other machines had been operating in the fields of the Republic. During 1976–1980 the production assets were renewed over one-third, the qualitative composition of the machine-tractor fleet of the collective and state farms was improved, the share of more powerful machines having greater load-carrying capacity and efficiency increased. At the same span of time power available per agricultural worker rose over 56 per cent. This is a vivid testimony that agricultural labour is being converted into a variety of industrial labour. In the 11th Five-Year Plan period new strides are being made in this direction. Agriculture is being reequipped with highly efficient machines and its electrification is continued on a large scale. In the five years the Republic's collective and state farms will be supplied with 275,000 tractors, 242,000 lor-

Ukrainian SSR's Gross Agricultural Output
(average annual, thousand million roubles)



ries, 68,000 grain harvesters, and with many other machines.

The chemicalisation and reclamation of lands is an important integral part for raising and intensifying agricultural production, a guarantee for high and stable crop yields. Between 1976–1980 the Republic's agriculture got 80,000 tons of mineral fertilisers – on the average from 110 to 112 kg per hectare of arable land. In 1985 the Republic's collective and state farms will get 20,300,000 tons of mineral fertilisers as compared to 16,000,000 tons in 1980. A large scope of work is being done for chalking gypsuming soils, applying chemical methods for plant protection. A wide-range programme for land reclamation in the Soviet Union contributed to a considerable expansion of irrigated and drained lands. During the past 15 years the tracts of irrigated lands in the Ukraine increased 4-fold while those of drained lands by 2.3 times. In 1980 the irrigated lands reached 2,020,000 hectares or 6 per cent of the whole arable land and perennial plantations while drained lands amounted to 2,910,000 hectares or 46 per cent of the total land-reclamation fund. Nowa-

days over 50 per cent of the collective and state farms possess such lands. Under the 11th Five-Year Plan 543,000 hectares of irrigated and 660,000 hectares of drained lands are to be made cultivable. The Republic's fleet of sprinkling machines and mechanisms amounted to 30,000.

The qualitative changes of the productive forces in the countryside require that the production relations be continually perfected and the process of the division of labour deepened. That is why the Party, Soviet and managerial bodies devote much attention to perfecting the organisation of production and guiding the economy.

This particularly applies to the specialisation and concentration of agricultural production on the basis of large-scale cooperation and agro-industrial integration. This is the main trend for a further development of agriculture, a new stage of realisation Lenin's ideas on cooperation under the conditions of a developed socialist society. The 26th Congress of the Ukraine's Communist Party has put forward the task for further deepening specialisation and concentration, for setting up a wide network of agro-industrial enterprises and amalgamations. Cooperation and integration are regarded not only as a more rational organisational form contributing to raising the efficiency of production but also as an important socio-economic factor for further socialisation of the production means, for converting agricultural labour into a variety of industrial labour, for solving social problems.

In 1980 the Ukrainian SSR numbered almost 2,500 inter-farm enterprises manufacturing agricultural produce and servicing agricultural production.

There are many examples testifying to the advantages of the production specialisation on the inter-farm basis. Owing to the specialisation, the production of beef in the Verkhnyodniprovsk district of the Dnipropetrovsk region increased by 20 per cent, the production costs per centner of increment of live weight decreased by 22.5 roubles and totalled 76 roubles. The inter-farm complex for livestock breeding provides for about two-thirds of the overall output of beef in the district. The profitableness of the pig-raising inter-farm enterprise reaches 63 per cent. The Republic's specialised enterprises produce up to 46 per cent of milk, 27 per cent of pork and beef, 80 per

cent of eggs, 69 per cent of vegetables, 50 per cent of fruit and almost three quarters of grapes.

As experience shows, the setting up of large-scale agro-industrial amalgamations has proved to be very effective in stepping up production. At the 26th CPSU Congress L. I. Brezhnev emphasised that the agricultural production should be closer connected with the system of procurement, transportation, storage, processing and selling of foodstuffs. All this is a single food complex. And it should be guided as the single complex.

Agrarian science makes a weighty contribution to agricultural production. Well-known are achievements of the Republic's scientists-selectionists in growing high-yield varieties of winter wheat and some other cultures. In the Ukraine vast areas are under such varieties of winter wheat grown in the Republic as the Mironivska Yuvileyna, Mironivska-25, Odesska-51, Akhtyrchanka, Dnipropetrovska-775, Khersonska-163, Odesska semi-dwarf, having potential yields from 80 to 90, and on irrigated land – 100 and more centners per hectare. Great successes have been achieved by the selectionists who grew new varieties of winter and spring tritikale.* Zoned varieties of cereal crops yield 60–70 centners and those of fodder crops up to 500 centners of green fodder per hectare.

Certain successes have been achieved in the seed growing of leguminous plants though the problem of quality and quantity of seeds of these high-protein cultures was not solved as yet.

The Republic's scientists have developed and realise successfully a complex programme for raising meat cattle husbandry. This programme provides for the improvement of the meat cattle breed, development of standard designs for specialised farms, building of fattening sites, development of the feed base, considerable expansion of farms and zones for breeding big horned cattle of high meat productivity.

The rural working people show preference to the intensive factors of developing the agriculture. As a result, despite several unfavourable years for harvesting, the average annual grain yield in 1976–1980 was 43.2 million tons or 3.2 million tons more as compared to the previous

* Wheat crossed with rye

five-year period. During those years in the collective and state farms the livestock increased and the livestock and poultry productivity rose. Average state purchases of agricultural produce have also increased.

The increase of the plant growing produce is mainly due to the raising of crop yields.

Output of Main Crops in All Categories of Republic's Farms

(average annual, centners per hectare)

	1971–1975	1976–1980	Accretion (+) or decrease (–) as against 1971–1975
Grain	24.7	26.1	+ 1.4
Sugar beet (industrial)	268	299	+31
Sunflower	15.8	14.4	– 1.4
Fibre-flax	5.1	5.3	+ 0.2
Potatoes	111	120	+ 9
Vegetables	129	146	+17

As was pointed out at the 26th Congress of the Ukraine's Communist Party the increase of grain production remains to be the task of prime importance. The 11th Five-Year Plan envisages an increase in its gross yield up to 51 million tons. Ukrainian field crop cultivators are stepping up the production of heavy and valuable varieties of wheat, rye, buckwheat, maize and other crops.

The Republic's beet root growers have also achieved appreciable results. The average annual production of beet root in 1976–1980 was 299 centners per each hectare, its average annual output being 53.6 million tons, or an increase of 17 per cent as against the figure of the 9th five-year plan. The 11th Five-Year Plan sets forth even more serious targets – to reach an average annual beet root production of 56–57 million tons. It is also envisaged to ensure the entire accretion of its gross output by raising the average beet root yields to 320 centners per hectare.

The 26th Party Congress has analysed in detail the problems of further growth of the branch, formulated a set of measures for accelerating the rates for production of meat, milk, and other farm produce. The Republic's Party organisation, Soviet and managerial bodies are car-

rying out considerable work to increase the livestock, to raise its productivity, as well as to intensify the production of the stock-raising branch.

Due to large organisational and educational work carried out by primary Party organisations of collective and state farms, selfless labour of the Republic's cattle-breeders the 10th Five-Year Plan for production of the main animal produce in all categories of the farms has been overfulfilled. The farms produced, over and above the plan, 262,000 tons of meat (in live weight), 2.2 million tons of milk, 2,900 million eggs, and 761 tons of wool. Annually the Republic was selling the state on the average more products than it did during the previous five-year period: cattle and poultry by 5.2 per cent, milk by 11.3, eggs by 32.4, and wool by 6.3 per cent. The average annual state purchases of animal produce increased almost in all branches.

The Guidelines for the Economic and Social Development of the USSR for 1981–1985 and the Period Ending in 1990 envisage a further increase of production of meat, milk and eggs. In the 11th Five-Year Plan period the average annual production of meat will reach 3.9 million tons, and that of milk – 22.8 million tons. To achieve these targets, the Ukrainian cattle-breeders will considerably increase the number of livestock, especially of cows and hogs, raise their effectivity and improve pedegree breeding, which is most important, and do their best to consolidate the feeding base. In conformity with the decisions of the Party the production of fodder is to be a specialised branch. In 1985 the production of fodder in the collective and state farms is planned to reach 90–92 million tons of feed units. This is 15–17 million tons more as compared with the average annual fodder production in the 10th Five-Year Plan period. To solve the problem of feed protein, the areas under soy-bean crops, pulses, and perennial grasses are being expanded, the production of protein additives, amino acids, enzyme preparations, premixes, and other products of microbioligical synthesis is increased. The total production output of formula fodders will amount to 25 million tons.

In the drive for raising the efficiency of production new initiatives are put forward directed at solving the main task of economic activity – to increase the output of fin-

ished produce. Now the initiative of sugar-beet growers and workers of the Honoriv sugar refinery in the Yampolsk district of the Vinnitsya region is known far beyond the boundaries of the Republic. Its essence lies in the fact that on the basis of deepening business-like ties between collective farms, state farms and sugar refineries, raising crop capacity and saccharinity of sugar-beet, realising the single wide-scale plan for the beet-root extraction, procurement, storage and processing, it is planned to produce not less than 50 hundredweights of sugar per each hectare of sugar-beet plantations. In 1978 the yield of sugar-beet was 438 centners per each hectare. 41.200 tons of sugar were produced from the procured raw material. As a whole, the district produced 50.2 centners of sugar per each hectare of the sown area. High results were also achieved in 1979.

This innovation initiates a new stage in developing socialist emulation between the workers of agriculture and of those branches of the industry which process the field and farm produce. Considerable reserves for further enhancing the efficiency of production are ensured by combining common efforts. That is why the above initiative has been taken not only in the Republic but beyond its boundaries as well. In the Russian Federation, for example, 3,500 farms and 89 sugar refineries operate using single complex plans. In the Ukraine agreements on labour cooperation were signed by 4,378 collective and state farms and 189 industrial enterprises.

Agricultural workers of the Chernihiv region are persistent in improving the land fertility, increasing the yield from each hectare. In the 10th Five-Year Plan period the region began applying to the fields more organic and mineral fertilisers which are used with higher efficiency. The complex system for increasing yield from each hectare helps specialists find specific approach to cultivating each field, use scientifically-based methods for planning and programming crop yields, for perfecting criteria of assessment of work of agricultural workers.

The results of work of corn-growers from the Chernihiv region for increasing yields on each hectare of the land carry conviction. In 1978, for example, labour productivity here was higher than on other farms of the Polissya area; the production expenditures per 100 roubles of

gross output (in comparable prices) amounted to 83 roubles; its production per 100 roubles of the basic production assets (payoff compared with the costs) comprised 78 roubles which is the highest index among all the Republic's regions. Here the gross output per 100 hectares of arable land was 4,500 roubles greater than the average figure for the Ukrainian SSR's collective farms. The net profit gained per 100 roubles of the basic production assets is a quarter greater than the Republic's average. The net profit from realisation of animal produce amounted to 59,000,000 roubles which is the highest profit among all the regions. The profitableness of livestock breeding is also almost the highest in the Republic. There is not a single deficient collective farm in the region.

Radical changes in land cultivation have been introduced by agricultural workers of the Poltava region who employed ploughless tillage. The effectiveness of the method was especially vividly confirmed in 1979 which was the most unfavourable for harvesting of all the five years. It was the crops sown on the areas with mouldboardless tillage that withstood the unprecedented drought and yielded better harvests. On the experimental farm of the Poltava regional experiment station each hectare so cultivated yielded 51.6 centners of grain, whereas ordinary tillage secured 41.3 centners per hectare. On the farms of the Lubny, Kozelshchina and Hlobino districts the rise of crop yields, on the fields where new technology was applied, was from 8.9 to 12.7 centners per hectare. During the six years of applying the new technology of tillage the farms of the region received additional 504,000 tons of grain and 48,000,000 roubles of profit.

The ploughless tillage wins a high appraisal of the leading scientists and specialists-practical workers of the Republic's various zones. In particular, twice Hero of Socialist Labour, Director of the Mironivka Scientific-Research Institute for Wheat Selection and Seed-Growing, Academician V. N. Remeslo proves that the surface cultivation, irrespective of autumn weather conditions, provides for abundant corn shoots in the best agrotechnical terms.

Raising the efficiency of production and quality is a complex and interrelated problem. The 10th Five-Year Plan period mapped out a transition from separate measures to the scientifically grounded system of quality control

which is a component part of the entire system of the branch management. It is being realised both by the state bodies and directly on the farms. This system envisages solution of such important tasks as planning procurements of agricultural produce with respect to the natural-economic zones and regions of the country, economic stimulation of improving the quality of the produce by perfecting the price formation, introducing the system of the State Standardisation, specialisation and concentration of production, training specialists, consolidating the material and technological base of the branch, as well as accelerating scientific and technological progress.

As before, the production of grain is the advanced sector for the rural communists, for all collective and state farms' workers. Together with increasing grain yields, the most urgent task is improving the grain quality, its protein and gluten content, etc.

Nowadays over 95 per cent of the country's population consume grain from the state resources. The demand for it is growing yearly. The Republic's farms do quite a lot to improve technological qualities of grain. For example, collective farms and state farms of the Odessa, Dnipropetrovsk, Kherson and other regions sell annually the state a large amount of grain of improved quality. This yields a considerable economic effect. The estimates show that one per cent of protein increase in wheat alone gives additional 600,000 tons of vegetable protein. This is the amount sufficient to meet the annual requirements of 16 million people. Besides, for selling the grain of improved quality the farms receive considerable additional remuneration in cash.

The Republic's cattle-breeders are also more and more persistent in their attempts to improve the quality of produce.

Cattle-breeders of the Lviv region have large experience in the production quality control. Days of quality control are held by each farm monthly. The managers and specialists together with the most active members of the farms analyze the results of introduction of the complex quality control system, achievements of science and advanced experience. All this yields good results: forage is more properly used, and more first-grade milk, etc. is sold.

The experience of introducing the quality control system

in the Dnipropetrovsk, Lviv, Zaporizhya, and other regions is a convincing proof that the growth of crop and animal produce is possible only on the basis of perfecting the organisation of production and technological processes, improving the quality of labour both of individual workers and entire work collectives. Labour is the decisive factor among the whole set of factors contributing to the quality of the produce. That is why the 26th Party Congress noted: "And, of course, an essential component of efficiency is the further improvement of the economic conditions in which the collective and state farms function. The success of all plans and all programmes depends on the attitude to the job, on the conscientious work of the country folk, and, therefore, on the system of moral and material incentives".

The 26th Congress of the Communist Party of the Ukraine stressed that one of the most important trends in agriculture is the expansion of socio-cultural construction. Under the 11th Five-Year Plan the investments for social needs of the countryside are to be increased. In the countryside, housing construction is placed on a broad footing, clubs and movie houses are built, the network of radio and TV sets is extended.

The general educational level of rural population has incomparably increased. Now the countryside is provided with experts in more than 100 specialities. The share of machine-operators in the total number of the collective farmers and state farms' workers has been considerably increased.

Much attention is devoted to training machine-operators and enhancing their qualification. In this respect, the ensuring of better working and life conditions, meeting social needs of the people acquire ever greater importance. No less concern than for the development of production is displayed by the managers of farms, Party committees, Soviet and trade union organizations for satisfying the housing and services needs, ever growing demands of the country folk.

Transport and Communications

In today's development of the country's socialist economy transport plays an increasingly great role in both solving social problems and enhancing production efficiency. As was stated at the 26th Congress of the CPSU, the main task of transport is to meet timely and in full the needs of the national economy and the population in transportation. The Party and the Soviet government pay great attention to the improvement of transport in view of its special importance for laying the material and technical foundation of communism.

The transport of the Ukraine is an integral part of the single transport system of the Soviet Union. It engages hundreds of thousands of workers and has production funds which make up 20 per cent of the Republic's total funds. In the 10th Five-Year Plan further progress was achieved in the development of the material and technical base of transport. The total length of railways, paved highways, and oil and oil-products pipelines increased. Many installations were renovated, and the structure of the rolling stock and the merchant marine and river fleet updated.

The ever growing volume of industrial and agricultural production, and the expanding international economic contacts caused an increase in transportation. The total freight turnover of the whole transport system of the Ukraine in 1980 rose 9,8 per cent, as compared to 1975.

As before, railways are leading in the Republic's transport, though their share is slowly diminishing owing to the increased freight deliveries by motor and pipe transport.

Capital investments in the railway transport go considerably beyond the sum total allocated for the 10th Five-Year Plan period. In 1976–80 quite a few new railways and parallel tracks were laid in the Ukraine, electric traction was provided for 372 km of railways and another 2,238 km were fitted out with automatic blocking and centralized dispatching systems. This enlarged the freight-carrying and throughput capacity of many sections of freight-intensive lines. By the end of 1980 the operating length of the Republic's railways exceeded 22,000 km. In the 11th Five-Year Plan the freight turnover on railway transport will grow by 11 to 12 per cent.

The development of the railway transport involves the betterment of the organizational standards of operations through more efficient utilization of technology, advanced planning and management of the transportation process, and improved services to the national economy and the population. Good progress is registered in carrying out the very important task of the maximal satisfaction of the population's requirements in transportation. This is done, in the main, by strengthening the material and technical base of the railways passenger-handling facilities: the fleet of passenger carriages is being replenished with comfortable all-metal cars; 44 new railway stations, 393 passenger pavilions and a number of platforms have been built in the recent past; many stations are furnished with ticket printers and ticket selling slot machines, improved passenger information facilities and left luggage offices.

Every day the Ukraine's railway stations sell tickets for passenger and commuter trains to 1.4 million people. The capital of the Soviet Ukraine maintains regular railway traffic with every regional centre of the Republic, with the capital of the USSR, Moscow, and with many administrative and industrial centres of the Soviet Union. By

the end of 1980 the volume of passenger transportation by rail in the UkrSSR was 11.5 per cent more than in 1975. Much is being done to develop and improve passenger conveyance by local and commuter trains; in 1980 their share in the total volume of passenger carriage exceeded 87 per cent.

The intensively developing motor transport was expanding its volume of traffic by an annual average of 3.6 per cent over 1976–80. The freight turnover by the end of 1980 was 19.7 per cent more than in 1975. In the 11th Five-Year Plan the freight turnover will go up another 18 to 20 per cent.

The material and technical base of the motor enterprises is on the upgrade. Built in 1976–80 were a number of new car parks, among them 7 for lorries (holding 2,050 vehicles), 5 for buses (1,190 vehicles) and two for taxis (500 vehicles), as well as 26 bus stations, etc. The fixed assets of the transport enterprises and organizations have grown half as much again. The freight-carrying capacity of the lorry fleet has increased by 32.1 per cent, including an increment of 20 per cent for common-carrier vehicles. The seating capacity of buses has grown too.

The composition of the motor fleet is being steadily improved. The share of all kinds of special-purpose vehicles now comes to 60 per cent. There has been an improvement in the performance of the common-carrier fleet. The productivity of labour has gone up 15.5 per cent. The gross product has increased by 23.8 per cent.

Today hundreds of thousands of motor transport workers provide services to 20,000 enterprises and organizations of the Republic's national economy. In 1980 the motor vehicle fleet carried 1,100 million tons of cargo and 7,800 million passengers.

Freight traffic is continuously progressing, mainly through its increased centralization, the development of containerized, palletized and packaged freight transportation and the implementation of scientific and technological achievements. Centralized freight carriage exceeds 90 per cent of the total turnover.

Motor vehicle transport leads in passenger conveyance, carrying 21 million people a day – more than the rest of the transport systems taken together. The Republic's bus service incorporates 16,000 routes stretching a total of

one million km. In the 10th Five-Year Plan the number of buses grew by 5,000 and today approaches 55,000, of which almost 30 per cent have large and extralarge seating capacity. The completely replenished taxi fleet operates in 492 cities and workers' settlements of the Republic.

Bus service operates practically in every Ukrainian city and township. The frequency of traffic has been increased on the urban lines of Kiev, Lviv, Kharkiv and other big cities, so that in the rush hours buses follow one another at 4 to 6 minute intervals. Construction of centralized traffic control stations with up-to-date communication facilities is nearing completion in every regional capital and other big cities of the Ukraine. Fourteen regions of the Republic have special bus lines intended to convey children to kindergartens and nurseries.

An improvement of bus traffic has been effected also in the countryside where more than 9,000 routes cover the length of 350,000 km, including 500 routes (7,000 km) added in the 10th Five-Year plan to provide 900 more villages with regular bus service. In Transcarpathian, Kirovograd, Kherson, Donetsk, Zaporizhya, Crimean and Cherkassy regions regular bus lines pass along every collective and state farm. During the school year buses on scheduled routes pick up some 500,000 children to school and back home without charge. Besides, 300 special routes have been launched into operation in the Republic for the same purpose.

Many car repair factories were fitted out to overhaul new types of lorries and passenger buses. Together with the specialization of the factories and improved management, this resulted in the increase of their output by 20 per cent and of labour productivity by 21 per cent in the 10th Five-Year Plan. The present-day repair and maintenance facilities can practically meet all the requirements of the Republic's motor transport.

Every year the transport and repair enterprises of the UkrSSR Ministry of Automotive Transport integrate into production 35–40 new scientific and technological designs with the annual economic effect of six to seven million roubles. Among the technical facilities produced to provide the mechanization and automation of car maintenance and repair are high-efficiency car lifts, diagnostic test stands,

etc. The share of mechanized and automated labour at the enterprises of the Ministry of Automotive Transport went up 8.5 per cent in the 10th Five-Year Plan.

Computers and automatic control systems are being put to work by motor transport on an increasingly large scale. Data processors and economics-oriented software are used to plan and control freight haulage and delivery to trade organizations and to check whether the buses arrive and depart on schedule. In the 10th Five-Year Plan the utilization of computers and automatic control systems provided an economic gain of close to 19.5 million roubles.

Large-scale construction and modernization of highways is going ahead in the Republic, with the attendant improvement of their maintenance and repair. 17,500 km of new roads were put into operation in the 10th Five-Year Plan. By the beginning of 1981 the length of the highways totalled 133,700 km. In twenty of the Republic's regions nearly every collective and state farm has paved roads reaching its central farmstead. In the rest of the regions such access roads will be built in the 11th Five-Year Plan, as was pointed out at the 26th Congress of the Communist Party of the Ukraine. Over the same period capital investments in the development of the Republic's road network will exceed 1,6000 million roubles. Fairly large means will be allocated for motor road repairs and upgrading.

To enhance traffic safety and reduce air pollution, transit passage of cars is being removed from big cities. Construction of detour roads is going on in Kiev, Kharkiv, Dniprrpetrovsk, Ternopil, Vinnitsya, Lviv, Mikolayiv, Voroshilovgrad, Sumy and other cities.

In 1976–80 the enterprises of the UkrSSR Ministry of Automotive Transport increased labour productivity by 23.2 per cent in construction, by 21.9 per cent in production and by 51.9 per cent in road maintenance and repairs, largely overtopping the planned targets.

The Ukraine effects transportation on 4,500 km of internal waterways. With the filling of the Kaniv reservoir, the cascade of artificial seas along the Dnieper was completed. The navigation channel from Kiev to Kherson is 3.65 m deep, allowing passage of sea boats.

The Republic's fleet is being replenished with new modern ships, among them combined-purpose "river-sea"

vessels for carrying import and export freight between the ports of the Dnieper and the Danube and for the delivery of boxite, equipment and other cargo from Yugoslavia, Greece and Italy. By the end of 1980 the fleet of the Ukraine numbered nearly 600 freighters and up to 300 passenger motor vessels, including 89 express ships. The total freight turnover on the Ukraine's river transport in 1980 was 51.3 million tons as compared to 42.3 million tons in 1975.

The UkrSSR River Fleet Board is developing its production facilities. Modernization of the first unit of the Kiev Shipyard has been completed, a new hullwelding shop has been built at the Kherson Shipyard, and some other dockyards are also expanding in size. New designs include local line motor ships accomodating 300 passengers each, barges of 2,100 ton cargo-carrying capacity and special hydraulic sand loaders with the hourly output of 900 cubic metres.

Our country's steadily expanding international trade enhances the role of sea transport in freight and passenger conveyance. The Black Sea Ship Line, the Sea of Azov Ship Line and the Soviet Danube Ship Line located in the Ukraine operate 17 commercial sea ports and 7 ship repair facilities. The Republic's favourable geographical position allows round-the-year navigation. The three shipping companies perform about a third of the country's annual seaborne shipping. More than 20 million tons of cargo and almost 30 million passengers a year are carried by coastal transportation, and over 300,000 people make international voyages on passenger ships.

Very important are the new shops opened at the Ilyichivsk shipyard, designed to put out heavy-weight containers of the international standard, and the Soviet Union's most powerful specialized ore transfer complex built in Mikolayiv's harbour. The second section of the Ilyichivsk commercial seaport has been completed.

The Ukraine provides for a rapid development of civil aviation. The Ukrainian Civil Aviation Board, one of the largest air transport units in the USSR, has air service with 17 foreign countries and makes regular flights inside the Republic.

Planes flying between Moscow and Zurich, Montreal, Bucharest land at Kiev's international airport, Borispil.

The Odessa airport takes in all transit planes on flights from Moscow to Africa. The Ukrainian Civil Aviation Board was actively engaged in servicing the participants and guests of the 22nd Olympic Games. Some 1.4 million foreign passengers went through the Republic's airports in 1980, four times more than in the first years of the 9th Five-Year Plan.

Ukrainian airmen have become reliable helpers to geologists and oil-industry workers, they conduct fish reconnaissance, patrol gas pipelines and power transmission lines, fly the air ambulance service, perform air photography, detect and fight forest fires, etc. In agriculture the Republic's civil aviation workers are known as "winged grain growers" because they carry out one-fifth of the country's crop dusting.

The Ukraine's pipeline transport has developed at an accelerated pace. Transportation of oil and oil products in 1980 went up more than 2.2 times as compared to 1975, disburdening much of the railway transport. In the 10th Five-Year Plan the total length of oil pipelines increased by more than 44 per cent and now equals 3,221 km.

The Ukrainian SSR extensively develops its communication services. A growing number of intercity cable and radiorelay lines are coming into operation, telecommunication centres are being mechanized on a large scale, and collective and state farms are getting more telephone facilities. Nearing completion is the overall automation of the urban and rural telephone system. In 1976–80 the capacity of telephone exchanges in Ukrainian cities was expanded, an almost 25 per cent increase per 100 city residents.

There was a further extension of the radio and television service whose material and technical base was considerably enlarged. In the 10th Five-Year Plan the number of radio receivers wired to broadcasting networks grew by four million. Stereophonic radio broadcasting was started in Kiev and Donetsk. Today practically the whole population of the Ukraine can receive programmes of the Moscow TV Centre, and more than 85 per cent of Ukrainian residents are able to see telecasts in colour.

For the Welfare of Man

ΚΕΦΚΥΤ

An important place in the "Guidelines for the Economic and Social Development of the USSR for 1981–1985 and for the Period Ending in 1990" is assigned to the programme of social development and improvement of the Soviet people's well-being. The programme envisages the fuller satisfaction of the population's needs, the betterment of working and living conditions, the improvement of health protection and recreational facilities, and the advancement of the socialist way of life and of the whole system of social relations. As L. I. Brezhnev pointed out in his report to the 26th Congress of the CPSU:

"The central objective of the Eleventh Five-Year Plan is to ensure the further improvement of the Soviet people's well-being on the basis of the steady and constructive development of the national economy, accelerated scientific and technological progress, the transition of the economy to the road of intensive development, the more rational utilization of the country's productive potential, the maximum saving of all types of resources and an improvement in the quality of work."

The creatively developed and consecutively implemented economic strategy of the CPSU is founded on the practical knowledge and utilization of the economic laws inherent in socialism and, above all, of the basic economic law of the communist mode of production. Its main principle is the fuller satisfaction of the growing requirements of all members of society and their all-round development through continuous growth and improvement of production on the basis of new technology. The advancement of social production along these lines, promoted by the economic laws of socialism and communism, was expounded by K. Marx, F. Engels and V. Lenin.

The Soviet people's welfare has been a top priority for the Communist Party and the Soviet government at every stage of our country's development.

The upbuilding of developed socialist society in the USSR opens broad vistas for a speedy rise in people's living and cultural standards and a further improvement of the socialist way of life. Society has now many more opportunities to reach this goal through utilization of the country's powerful economic potential. As was emphasized at the 26th CPSU Congress, during the 10th Five-Year Plan period the Party's line on increasing the material and cultural wealth of the people was consistently put into effect. A major new step was made in the solution of social tasks.

Together with the rest of the USSR, the Ukraine carries out an extensive programme of economic and social development. The steady growth of productive forces, the strengthening of the economic, scientific and technological potential and the dynamic and proportional development of the national economy are reliable prerequisites for progress in people's well-being and culture. The immediate material source of expanding production and improving the quality of life – the national income – is becoming ever larger in the Ukraine. In the 10th Five-Year Plan it was 22 per cent higher than in the preceding five-year period and in 1980 exceeded 77,000 million roubles, which was nearly one-fifth of the national income of the whole USSR. Seventy five per cent of the national income was spent on public consumption, but actually four-fifths of the national income went directly towards the people's well-being, as

part of the accumulation fund was channeled into housing, social and cultural construction.

The growth of the national income used for accumulation and consumption ensured the fulfilment of the 10th Five-Year Plan's assignments for the improvement of living standards through pay rises for factory and office workers and increased incomes of collective farmers derived from the publicly owned economy. Under developed socialism the basic form of distributing material benefits among the working people are wages and salaries paid from the consumption fund. Higher wages and salaries were responsible for three-quarters of the population's total income increase during the 10th Five-Year Plan period. Pay rises are effected in a way which enhances the stimulating role of distribution according to performed work and warrants greater dependence of remuneration on the end result of work.

Completed in 1977 was the rise in the minimum monthly wage and salary to 70 roubles in all branches of the national economy. The average monthly pay of factory and office workers in the national economy of the Ukraine increased by 16 per cent over the 10th Five-Year Plan period and amounted to 155 roubles in 1980 (against 133.5 roubles in 1975 and 93.9 roubles in 1965). The remuneration of collective farmers rose during the same five-year period by 30 per cent and in 1980 came to a monthly average of 104 roubles.

A salient feature of developed socialism is distribution of material and cultural benefits through social consumption funds which are part of the national income intended to meet social and cultural requirements of every member of society and to support the disabled. These funds are disbursed on free education at all levels including advanced professional training; free medical care; benefits, pensions and scholarships; annual full-pay leaves; vouchers to sanatoriums and holiday homes issued at no cost or at a discount; maintenance of children in preschool establishments; etc.

Social consumption funds grow at a rapid rate. In the 10th Five-Year Plan they increased by 31.5 per cent and in the Ukraine reached 20,600 million roubles in 1980 compared to 16,100 million roubles in 1975 and 7,400 million roubles in 1965. Per capita payments from the

social consumption funds were 412 roubles in 1980. It is noteworthy that the better part of the social consumption funds comes to the population as monetary payments. In the 11th Five-Year Plan social consumption funds will go up again and in 1985 will amount to 25,900 million roubles, a 24 per cent increase on 1980.

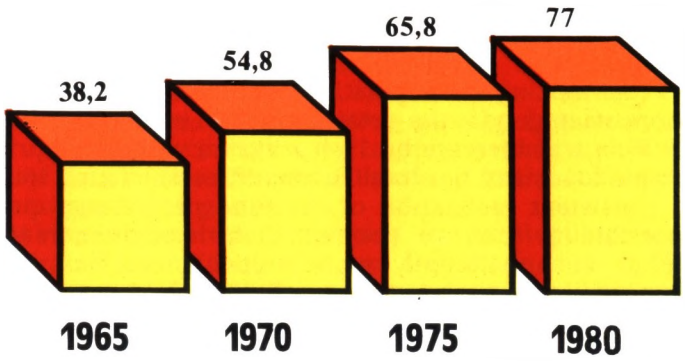
In 1976–80 pension coverage was improved for certain categories of workers, the spending quotas for food and drugs at some health protection establishments and board-and-lodging houses for the aged and invalids were increased, increments to schoolarships of some categories of vocational school students were established, the material and living conditions of veterans of the Great Patriotic War were improved, free distribution of textbooks was introduced for pupils in the first to fifth forms of general school, etc.

Together with bonuses and benefits from social consumption funds, the average monthly wage and salary of factory and office workers in the Ukraine's national economy reached 215 roubles in 1980 as compared to 183.1 roubles in 1975 and 125.7 roubles in 1965. In the 11th Five-Year Plan pay rises for industrial and office workers are to grow by 11.7 per cent and the incomes of collective farmers earned in the publicly owned economy will go up 19.7 per cent.

The consecutive implementation of the broad social programme ensured a considerable increase of real incomes. Real per capita incomes in 1976–80 went up 17 per cent; in the 11th Five-Year Plan period they will grow by another 17 per cent. Whereas in 1965 real incomes of collective farmers (per each family member) amounted to 76 per cent of workers' wages and salaries (in the same estimation), in 1980 they were just about equal. This shift signifies the strengthening of unity and homogeneity of our society and makes evident the achievements of the socialist way of life.

Very important to the steady improvement of living standards and all-round development of the working people is the reduction of the working day and the working week. Between 1955 and 1979 the working week of industrial workers was narrowed from 47.8 to 40.4 hours; with shorter preholiday shifts and free holidays taken into consideration, the working week averages 39,6 hours. The

Growth of National Income in the Ukrainian SSR
(in thousand million roubles, in actual prices)



importance of this accomplisment takes its full meaning against the background of the 1913 figures for the tsarist Russia: at that time the working week at enterprises of large-scale industry continued for 58.5 hours and lasted much longer at smaller enterprises. Even today in many capitalist countries the working week is more extended according to the data of International Labour Organization and averages 41.2 hours in France, 41.9 hours in the FRG, 44 hours in Great Britain, 44.5 hours in Switzerland, and 50.5 and 56 hours in South Corea and Egypt, respectively. The growth of people's well-being is inseparable from the fuller satisfaction of their demand for various goods and services. "Needless to say, improving the standard of living does not boil down to simply increasing money incomes," was stated at the 26th CPSU Congress. "Today, in the view of the Central Committee of the CPSU, the task moving to the foreground is that of improving supplies of food and manufactured consumer goods to the population." The accelerated development of the industries responsible for consumer goods production, the dynamic growth of agriculture and its transition to industrial lines, the expan-

sion and improvement of trade and of public and cultural services is therefore essential for raising people's welfare.

Much attention is given to the improvement of the trade service. The steadily increasing wholesale and retail trade network is getting updated equipment. Widely implemented are such advanced forms of trade as self-service sales and booked sales in places of residence and work. Following the expansion of the population's incomes and the stocks of consumer goods, the retail turnover in the 11th Five-Year Plan will increase by 19.4 per cent, with retail prices of staple foods and nonfood commodities remaining stable. The consistent realization of the food programme makes it possible to improve people's diet through increasing supplies of nutritionally more valuable eatables. More and more clothing, shoes (especially for children), textiles and household goods are offered for sale.

The Communist Party and the Soviet government regard the larger scale and better quality of housing construction as a major factor in improving the living conditions of the people. Article 44 of the USSR Constitution proclaims and guarantees the right of the citizens to housing, a thing unknown in any bourgeois state. In our country this right is ensured by the development and upkeep of state and socially-owned housing, by assistance for cooperative and individual house building, by fair distribution of housing and also by low rents and low charges for utility services. Over 1918–1980 the USSR built 3,511 million sq m of housing, including close to 656 million sq. m in the Ukraine. At present the Soviet people receive 5,500 new flats daily. In 1976–80, 12,400 million roubles were invested in housing construction in the Ukraine, 237 million roubles above the planned target. The 91.4 million sq. m of housing built in this period enabled nearly 8 million people to improve their living conditions.

An immense achievement of our country's working people is the world's lowest rent which has remained stable since 1928, i. e. for more than half a century, and averages not more than three per cent of a worker's family budget. The tenants' rent and payments for utility services in the USSR cover less than one-third of the expenses, the remaining costs being shouldered by the state. As was emphasized at the 26th Congress of the Communist Party of the Ukraine, priority must be given to the further

improvement of housing conditions, including better layouts, furnishings and quality of flats. New houses are built to updated designs with improved apartment layout, comfort, decoration and facilities. In the 11th Five-Year Plan 80.7 million more sq m of housing will be built enabling another 2.5 million families to move to new houses and flats.

Communal services to the Ukraine's population increase in quantity and quality with every passing day. Every city is provided with central water supply systems and 80 per cent of flats in the cities and 60 per cent in the countryside are equipped with gas ranges.

Public services are developing in the Republic at an accelerated pace, turning more and more into a large mechanized branch of the national economy. The application of scientific and technological innovations helps to speed up and improve order fulfilment and broaden the range of services. There has been a marked increase in the number of public services enterprises and in the scope of rendered services. In the 11th Five-Year Plan the volume of services available to the population will go up 1.3 times. Services in the countryside grow even more rapidly, especially in the field of repairs and construction fulfilled to order.

Free medical care for the population is a top priority in the system of social measures carried out in our country. "Of the social tasks none is more important than care for the health of the Soviet people," was stated at the 25th CPSU Congress. Health protection is ensured by free medical aid rendered by state health establishments; extension of the network of medical and health building institutions; broad prophylactic measures and measures of environmental improvement; by the development and improvement of safety techniques and sanitation in production; special care for the health of the rising generation; and furtherance of scientific research aimed to prevent and reduce the incidence of disease and ensure a long active life for citizens.

Our country spends ever more money on health protection chanelling it to the development of both medical aid and disease prevention measures. Exactly this was highlighted in the report to the 26th Congress of the Communist Party of the Ukraine which said that "serious

and persistent work must be done to further improve the quality of medical care, extend the network of health and disease-prevention establishments, develop specialized medical aid and implement new progressive methods of diagnostics and medical treatment."

The USSR leads the world in providing medical aid. The latest publications show that there are 159 doctors per 100,000 population in Japan, 164 in Great Britain, 153 in France, 198 in Italy, 225 in the USA and 375 in the USSR. Towards the beginning of 1980 the Ukrainian SSR had 361 doctors per every 100,000 residents.

In the 10th Five-Year Plan there was a considerable extension in the Ukraine of the health establishment network which received new hospitals with 59,500 beds and outpatient clinics handling nearly 104,000 patients per shift.

In the Ukraine, as in the whole of the Soviet Union, the state provides comfortable living conditions for the elderly. The pensionable age of industrial and office workers and collective farmers is 60 years for men and 55 years for women. Pensions for people in tough occupations start 5 or 10 years earlier. In the 10th Five-Year Plan much has been done to improve the social security scheme: the minimum size of pensions to factory and office workers and collective farmers was raised, some categories of pensioners were given additional benefits, the pensionable age was reduced for certain groups of the population, etc. The UkrSSR spent close to 30,000 million roubles on pensions, a nearly 40 per cent boost on the preceding five-year period. During this time the average size of pensions increased by more than 16 per cent for factory and office workers and by almost 40 per cent for collective farmers.

In the Soviet Union all the expenditures on pensions are covered by the state. In accordance with the decisions of the 26th CPSU Congress, beginning from 1981 the minimum retirement and disability pension rates are to be raised for factory and office workers and for collective farmers.

One of the prominent features of the socialist way of life is the unremitting concern of society for the upbringing of the rising generation, the development of the

educational system and the improvement of general educational and vocational standards of all workers.

The state allocates large funds for the maintenance and development of preschool institutions and educational establishments. The annual upkeep cost of a single child at a nursery is 560 roubles and at a kindergarten nearly 480 roubles, of which 80 per cent is covered by the state. Education at all levels and vocational training being free, our state spends each year more than 180 roubles on every general school student, 680 roubles on a secondary specialized school student and over 1,000 roubles on a college or university student.

The 11th Five-Year Plan envisages the building in the Ukraine of preschool institutions with accomodation for 500,000 children, so that by the end of the five-year period up to 60 per cent of the Republic's tots will be covered by the network of nurseries and kindergartens.

During the 11th Five-Year Plan period more than 300,000 million roubles from the Ukraine's national income will be spent on consumption, housing, and social and cultural construction.

The stable dynamic growth of our economy will be ensured by the fuller and more effective use of the available production, scientific and technological potential and of natural resources, and by the consistent improvement of the machinery of socialist economic management. This will provide a firm foundation for the further increase of the Soviet people's welfare and cultural level and will produce a favourable effect on every aspect of people's life: consumption, housing, working and living conditions, culture and recreation.

Science and Culture

УНИВЕРСИТЕТ

The conditions in which the national economy is developing in the 1980s make the accelerated advancement of science and technology a crucial factor. In the contemporary epoch of scientific and technological revolution all roads to production efficiency go by way of science which manifests itself more and more as a real productive force. Against this background the growth of the Ukraine's scientific potential is gratifying: in 1976–80 fifty new scientific establishments were set up, including twenty-five research institutes and their affiliates. Inaugurated under the auspices of the UkrSSR Academy of Sciences were the Physico-Chemical Institute in Odessa, the Institute of the Applied Problems of Mathematics and Mechanics in Lviv, the Institute of Technical Mechanics in Dnipropetrovsk, and the Institute for Social and Economic Problems of Foreign Countries in Kiev. The 10th Five-Year Plan gave birth to such research establishments as the Institute of the Non-Black Zone Agriculture in Korosten, the Veterinary Institute in Kiev, the Institute of Automatic Control Systems for Municipal Economy in Kiev, and some others.

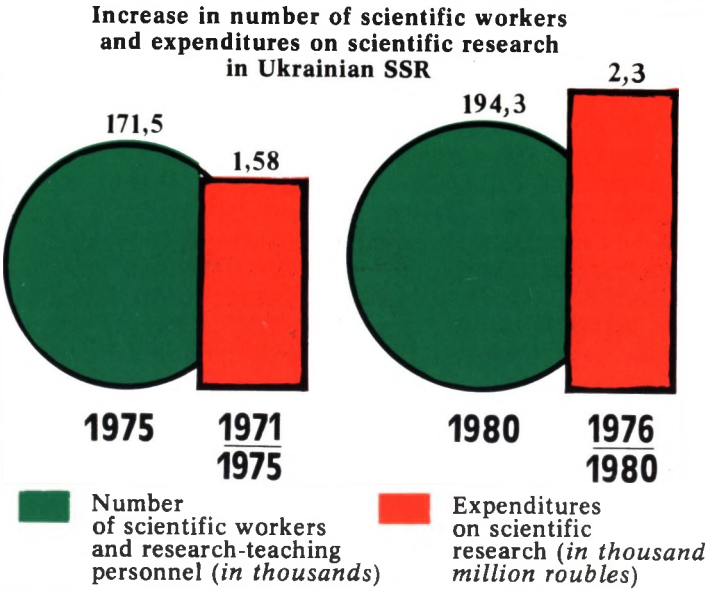
Large funds are allocated to strengthen the material base of sciences. In 1976–80 more than 7,000 million roubles were spent on new technology. All in all, the expenditures on research and development and on technological advancement increased during this time half as much again in comparison with the preceding five-year period. The UkrSSR Academy of Sciences proved to be a veritable headquarters of science.

The high efficiency of the UkrSSR Academy of Sciences can be seen from the fact that in 1976–80 its staff published over 2,600 monographs and more than 68,000 scientific articles, received 6 diplomas for the discovery of previously unknown natural phenomena and registered more than 9,000 copyrighted inventions. Forty-one licences for the Academy's developments were sold to foreign countries. Forty of the Academy's scientists were granted the Lenin and State Prizes of the USSR.

New important achievements have been gained in the fields of mathematics and nonlinear mechanics, strength of materials, theoretical and experimental cybernetics and general control theory. On the basis of new developments in the theory of digital converters far-reaching solutions have been suggested aimed to create high-efficiency computers with improved performance. Essentially new programming technique has been elaborated to allow the industrial production of software.

Some of the discoveries by the Ukrainian physicists have received world-wide recognition, among them the formation of well-deformed heavy nuclei; the phenomenon of quantum diffusion in crystals which will have a strong impact on the further development of low-temperature physics and technology; the discovery of chemical passivity toward oxygen of ultradispersion forms of iron, titanium and silicon found on the moon's surface.

Researchers in geology have developed new theoretical concepts on the origin and laws of deposition of petroleum and gas, elaborated stratigraphic maps of sedimentary strata on the territory of the Ukraine and summarized their views in the eleven-volume "Stratigraphy of the Ukraine". They have also generalized the data received from the deep seismic exploration of the territory of the Ukraine and the neighbouring socialist states and, proceeding from this, ascertained the principal regularities



in the earth crust's structure in Central and Eastern Europe.

The study of materials is very important to the development of the national economy and the acceleration of scientific and technological progress in the Republic's industry and agriculture. The significant development in this field included new designs and production know-how of multilayer superhigh-pressure pipes for main gas pipelines.

The 10th Five-Year Plan marked the beginning of extensive utilization of a whole gamut of new powder and superhard tool materials. They successfully challenge and in many cases outdo the expensive tool steels, eliminating the use of scarce tungsten and considerably stepping up the efficiency of many manufacturing methods in mechanical engineering.

Of great importance to the national economy were the new developments in the fields of welding materials, highly-effective technology of diamond synthesis and methods of obtaining diamondlike films, and others.

In close cooperation with medical workers, chemical scientists have introduced hemosorbents into medical

practice, capable of efficiently removing toxic substances from blood. The discovered phenomenon of metal transfer from the anode to the cathode during electrolysis of molten metals was used to lay down the foundations of the new industrial branch known as pyroelectrometallurgy. A number of essentially important results have been obtained in the theory of catalysis, chemistry of high-molecular compounds and phosphorus-organic chemistry. Theoretical and technological foundations have been laid for the processing of aluminium ores with a high silicon content.

Research conducted by the biologists of the UkrSSR Academy of Sciences made it possible to get very good results in genetic engineering and in the study of prolonged space flights influence on plants. They discovered new properties of cell membranes and, in particular, the system of calcium transfer through neuron membranes, grew new races of active microorganisms and developed the scientific foundations of their employment for obtaining proteins, vitamins, ferments and other bioligically active substances. New effective methods of the utilization of microorganisms in agriculture have been elaborated and a number of new varieties and hybrids of agricultural plants created. Among them is the Kiyanka wheat strain, presently being zoned in the Republic, which is distinguished for its ability to withstand winds and rains and for excellent baking qualities.

The more efficient performance of agriculture depends not only on biology scientists. Fruitful work conducted by other researchers made it possible to develop highly-effective processing techniques, including the drying of farm products, methods of storage of sugar beets and fruits, etc. A very profitable method of transporting perishable foodstuffs in containers cooled by liquid nitrogen has been suggested by Kharkiv scientists.

Much has been done in the Ukraine to strengthen the potential of social sciences. The UkrSSR Academy of Sciences' fourteen institutes in the humanitarian field employ today a staff of 1670 scientific workers and among them 170 doctors and 800 candidates of science, one member of the USSR Academy of Sciences, and 16 full and 35 corresponding members of the Academy of Sciences of the Ukrainian SSR. Wheareas in 1976–80 the total number of the Academy's scientific workers grew by 16.1

per cent, the increase in the number of doctors of social sciences was 37 per cent. Besides, the 439 departments of social sciences in the Republic's colleges and universities engage 5,660 teachers, including 211 doctors and 2,950 candidates of science.

As L. I. Brezhnev pointed out at the 26th CPSU Congress, "the country is badly in need of having 'big science' – in addition to working on fundamental problems – concentrate its efforts in a larger measure on solving key economic problems and on discoveries that could bring about truly revolutionary changes in production."

The increasingly high educational and cultural standards of the people, and the provision of ever more favourable conditions for the development of everyone's creative energy, abilities and talents are an important social and cultural gain of the socialist system and a salient feature of the Soviet way of life. The spiritual potential of the Soviet people is multiplying on a qualitatively new basis.

The whole system of public education has risen to a new high; the constitutional provision on compulsory universal secondary education for young people has materialized throughout the country.

In 1976–80 nearly 4.7 million people in the Ukraine acquired a secondary (general or specialized) education, a million more than in the 9th Five-Year Plan. Special attention is given to schools of general education considered to be the foundation of the whole public education system. These schools are developing as universal educational establishments covering academic, polytechnical and manual training. Essential changes are taking place in the structure of schools: the number of elementary and eight-year schools is diminishing, while the network of secondary schools which constitute the backbone of the school system is increasing. The share of secondary schools has reached 39.9 per cent, and they train 76.3 per cent of the schoolchildren.

There has been a considerable increase in the number and quality of "extended day" schools and "extended day" groups of regular schools in which schoolchildren stay till their parents finish work. The "extended day" programme is an important means of improving schooling and promoting communist upbringing. In the 1980–1981 schoolyear

the number of first-to-eighth form students in these schools and groups was over 2.4 million as compared to 1.9 million in 1975–1976.

Much is being done to improve the standards of labour upbringing and the contents and forms of schoolchildren's vocational guidance. Acquiring labour skills at schools today are 779,300 upperclassmen.

To raise the scientific level of education, daytime schools have introduced revised courses of instruction in mathematics, physics, chemistry, biology and geography.

In 1976–80 alone, 435 titles of school textbooks totalling 151.3 million copies were published in the Republic, and close to 110 million textbooks (186 titles) were supplied by the Moscow *Prosveshchenie* (Enlightment) Publishers. Children in the first-to-fifth and preparatory forms get their textbooks free of charge. Over the past five years 7,700 million roubles were allocated from the state budget for the upkeep of general schools (capital investments not counted).

Schools of vocational-technical training have become a major source of skilled work force. Especially promising among them are schools which, apart from teaching trades to young people, give them a secondary education. In the 10th Five-Year Plan the transition of vocational-technical schools to secondary educational establishments was close to completion. Over 1976–80 the vocational-technical schools turned out 1.8 million qualified workers, of whom nearly a million (58 per cent) received a secondary education. The steadily progressing teaching staff implement advanced methods and forms of instruction and use the experience of industrial front-rankers and innovators.

The material and technical base of vocational-technical training has been enlarged. Built in the 10th Five-Year Plan were school complexes and premises for 127,000 students, hostels with accomodation for 76,000 students and canteens seating 34,000. As many as 1,169 school workshops and 4,700 studies and laboratories were opened. Over the same period the students of vocational-technical schools put out 97 million roubles worth of manufactured product and fulfilled work at industrial enterprises and construction sites to the tune of 433.3 million roubles.

The Guidelines for the Economic and Social Development of the USSR for 1981–1985 and for the Period Ending

in 1990 envisage the continued development of the network of vocational and technical educational institutions as an important source of skilled manpower for the national economy. In 1981–85 the number of industrial cadre finishing these institutions will be brought to 13 million in the USSR, including 1.9 million in the Ukraine.

An important role in the public education system is assigned to secondary specialized technical and non-technical schools whose activities are conducted on the basis of today's scientific, technological and social progress.

The modification of the network of specialized secondary schools caused a slight reduction in their quantity, however the number of students in 1980 was 17.4 thousand up on 1975, mainly due to the increased enrollment in daytime departments of these schools. The growing share of daytime departments (64.1 per cent in 1980 against 62.9 per cent in 1975) in comparison with night departments and correspondence courses promotes a better quality of training. In 1976–80 the secondary specialized schools trained 1,122,800 specialists for various branches of the national economy (among them 706,500 graduated from daytime departments).

The constantly expanding and improving material and technical base of the secondary specialized schools contains all the necessary equipment, instruments and teaching aids. 86 new schoolhouses, 120 hostels with room for 49,000 students and 67 canteens with 12,200 seats were built during the 10th Five-Year Plan period.

Institutions of higher learning are a crucial component of the system of public education. Today they direct their activity towards fulfilment of the decisions taken by the 26th CPSU Congress, intended to further improve the quality of students' professional training and ideological and political education, and to strengthen the link with production and expand involvement in communist construction. Instruction in higher school builds on the foundation that the graduating specialists, apart from mastering an adequate amount of knowledge and skills, must also learn how to solve new problems and efficiently use the latest scientific achievements, steer through the increasingly great flow of information, put into practice the theory of Marxism-Leninism, and clearly comprehend and actively execute the Party's political aims. In carrying

out this task, higher school has made good progress in providing the national economy with skilled specialists. It now plays a more important role in social, economic, scientific and technological development. The subject matter and methods of instruction have been improved, the best accomplishments of science, technology and production have been introduced into the curricula, and wide use is being made of technical aids.

Secondary specialized schools in the Ukrainian SSR and number of students in them
(as of beginning of schoolyear)

Schools and students	Schoolyear		Increment (+) or decrease (−) in per cent (1975/76–1980/81)
	1975–76	1980–81	
Number of secondary specialized schools	730	727	−0.4
Number of students in secondary specialized schools (in thousands)	783.8	803.1	+2.5
including:			
in daytime departments	493.4	513.7	+4.1
in night departments	79.6	76.0	−4.4
in correspondence course	210.8	213.4	+1.2

In 1976–80 the Republic's schools of higher learning turned out 701,200 specialists including 416,300 trained in daytime departments – an increase of 68,700 and 74,300, respectively, as compared to the 9th Five-Year Plan. The national economy has received an ample replenishment of expert personnel.

Scientists from the higher schools' staff carry out a large amount of research enlisting more and more students for scientific work. In 1976–80 the volume of such research expanded by 46 per cent and ran into 1,100 million roubles.

The material and technical base of the institutions of higher learning is steadily improving. Expenditures on capital construction equalled 265 million roubles in 1976–80. Higher schools are receiving sophisticated equipment and up-to-date instruments.

In the 11th Five-Year Plan higher and secondary specialized schools are to train 1.9 million specialists.

Institutions of higher learning of the Ukrainian SSR and number of students in them
(as of beginning of schoolyear)

Institutions of higher learning and students in them	Schoolyear		Increment (+) or decrease (−) in per cent (1975/76–1980/81)
	1975–76	1980–81	
Number of institutions of higher learning	142	147	+ 2.8
Number of students in them (in thousands)	831.3	880.4	+ 5.9
including:			
in daytime departments	446.6	506.9	+13.5
in night departments	111.9	103.9	- 7.2
in correspondence course	272.8	269.6	- 1.2

Great achievements have been scored in moulding the new man fit to personify spiritual wealth, moral purity and physical perfection. An important part is played here by houses of culture, clubs, libraries and museums. Over the past years their network has extended, they started introducing new deversified work-styles of essentially improved quality. In 1980 the Republic numbered 26,100 houses of culture and clubhouses, 26,200 libraries, 167 state museums and more than 4,500 public museums run on a voluntary basis. Today there are over 260,000 choir, drama, dance and other amateur groups in the Ukraine, including 256 amateur theatres. Participating in these creative activities are nearly 8 million factory and office workers, collective farmers, college and high school students, and children. Many talented performers were brought out by the First All-USSR Festival of Amateur Folk Art dedicated to the 60th anniversary of the Great October Socialist Revolution.

The Ukraine's libraries register an ever growing attendance. The number of their permanent readers exceeds today 30 million. The libraries' book stocks are constantly expanding: public libraries alone possess now more than 371 million books and magazines. To attract more readers and advertise new books, the libraries stage readers' conferences, soirées dedicated to famous authors, quiz competitions and gettogethers with the prototypes of books' heroes.

In 1976–80 over 1,000 million roubles were channeled to cultural-educational work from the Republic's state budget, complemented by the means provided by industrial enterprises, collective farms and trade unions. The task set by the Party for the 11th Five-Year Plan is to create a cultural complex in every district center, comprising a house of culture, library, music school, museum, bookshop, public garden, sports facilities, etc.

The Republic's creative intelligentsia have enriched the cultural treasury of our society with masterly works of literature and art. From the positions of socialist realism, Party principles and folk spirit, they show vividly and with artistic perfection the enthusiasm of heroic labour, the Soviet people's feat of arms in the Great Patriotic War of 1941–45 and the fruitful friendship of Soviet nations.

Masters of the stage creatively advance and multiply the best achievements of Russian and Ukrainian dramaturgy and all forms and genres of theatrical art. Eleven new theatres have been opened in the Republic of late.

New forms of cultural services to the population have emerged, among them spring and autumn theatrical festivals, days and weeks of art, and days of literature and art held in sister-republics. Great renown has been won by such festivals as "Revolutionary Song", "Glory to Labour", "Young Voices", "Kiev Spring", "Golden Autumn" and "Crimean Dawns" in which Ukrainian masters perfom together with talented troupes and soloists from the fraternal Soviet republics.

Ukrainian musical art with its rich traditions is flourishing more and more from day to day. Many new exquisite works have been composed, imbued with patriotism, internationalism, the feeling of friendship among Soviet nations and enthusiasm for communist construction.

The Union of Composers of the Ukrainian SSR incorporates 225 masters, among them such well-known composers as K. Dankevich, A. Shtoharenko, H. Maiboroda, P. Maiboroda, A. Kos-Anatolsky, I. Shamo, Y. Steshkovich, O. Bilash, and S. Sabodash. They make a weighty contribution to the advancement of Soviet musical culture and instil true artistic taste into the public at large and, especially, young people.

All major genres of graphic art – painting, sculpture and drawing – have been enriched with new works picturing present-day and past events in the life of the Ukrainian people, the Soviet way of life and the people's heroic deeds during the Revolution and in the defence of our Homeland against the invaders. One of the most significant monuments erected in recent years is the Memorial Complex (the Museum of the Great Patriotic War) in the Hero-City of Kiev, which, as L. Brezhnev said at its opening, "is a token of respectful memory of those who fought in the name of life and happiness of the Motherland, in the name of delivering the peoples of Europe and other continents from fascist slavery".

The Union of Artists of the UkrSSR comprises more than 2,000 artists. To get a true picture of the creative potential of the Republic's graphic arts, one must take into account many more thousands of amateur practitioners of painting, sculpture, drawing, carving and applied decorative art.

Much attention is devoted to the development of cinematographic art which V. Lenin regarded as the most important of all arts. At present the Republic has five film studios: two for feature films, one for popular science pictures, one for documentaries and one for TV videotapes. Over the past five years the first four studios have released 89 features, 138 TV serials, 26 full-length and 1,164 short animated cartoons, documentaries and popular science films as well as 416 newsreels. At the same time the "Ukrtelefilm" TV Studio has produced more than 300 motion pictures in various genres: features, documentaries, musicals and screened plays.

The Ukrainian Union of Cinematography Workers includes more than 620 film directors, cameramen, actors and other creative workers. Besides, there are hundreds of cinema enthusiasts in the amateur studios functioning in clubs, houses of culture, Young Pioneer houses and educational establishments.

The steadily extending cinema network comprises today 28,000 motion picture projectors plus 12,000 projectors in educational establishments, clubs and industrial enterprises (in 1940 the figure was only 5.800). Attendance at the Republic's cinemas in 1976–80 was 4,000 million people.

High in priority in the cultural life of the Soviet people is literature. The Republic's prose writers, poets and playwrights deem it their greatest vocation to faithfully serve the people and socialist society.

Ukrainian Soviet literature has produced many new works which organically combine ideological richness and artistic excellence. Their core are the themes of enthusiastic labour for the sake of building communism, Soviet patriotism, socialist internationalism and friendship among the peoples of the USSR.

The Union of Ukrainian Writers comprises more than a thousand prose writers, poets, playwrights and critics. In addition to such famous men of letters as M. Bazhan, O. Honchar, Yu. Zbanatsky, V. Kozachenko, M. Stelmakh, P. Zahrebelny, Yu. Mushketyk, B. Oliynik, L. Dmiterko, O. Kolomiyets and others, there is a continuous influx of new masters of literary word.

The Soviet people are the most actively reading nation in the world. The Ukraine can be cited as an example: in 1976–80 the Republic's twenty-six publishing houses put out more than 43,000 titles of books and booklets in editions totalling over 780 million copies. Nearly as many books, booklets and albums were received by Ukrainian booksellers from the Soviet Union's other publishers. This meant an annual addition of more than 250 million copies to the Ukraine's book stocks.

The following figures are proof of the important achievements in the development of book publishing in the Ukraine: whereas over the period of 120 years prior to the Great October Socialist Revolution there were published in the Ukraine, on the average, 20 titles of books in 100 copies per year, in 1918–1980 the number of published titles of books and booklets was close to 350,000 and the number of copies – 5,100 million.

Works by K. Marx, F. Engels and V. Lenin and collections of their political production were published in mass editions. A significant event in the Republic's life was the appearance in Ukrainian translations of L. I. Brezhnev's works *Following Lenin's Course* (in 8 volumes), *Small Land, Rebirth, The Virgin Lands* and others.

Large-scale work is going on aimed at the strengthening and retooling of the printing and publishing industry.

Quite a number of printing shops have been built or modernized.

Television and radio are a great boon to the communist upbringing of the working people. Today in the Republic there are more than 12 million TV sets, 11.7 million radio sets, and 17.7 million receivers wired into broadcasting networks. Their number is steadily increasing. Practically each Ukrainian family has a television and a transistor.

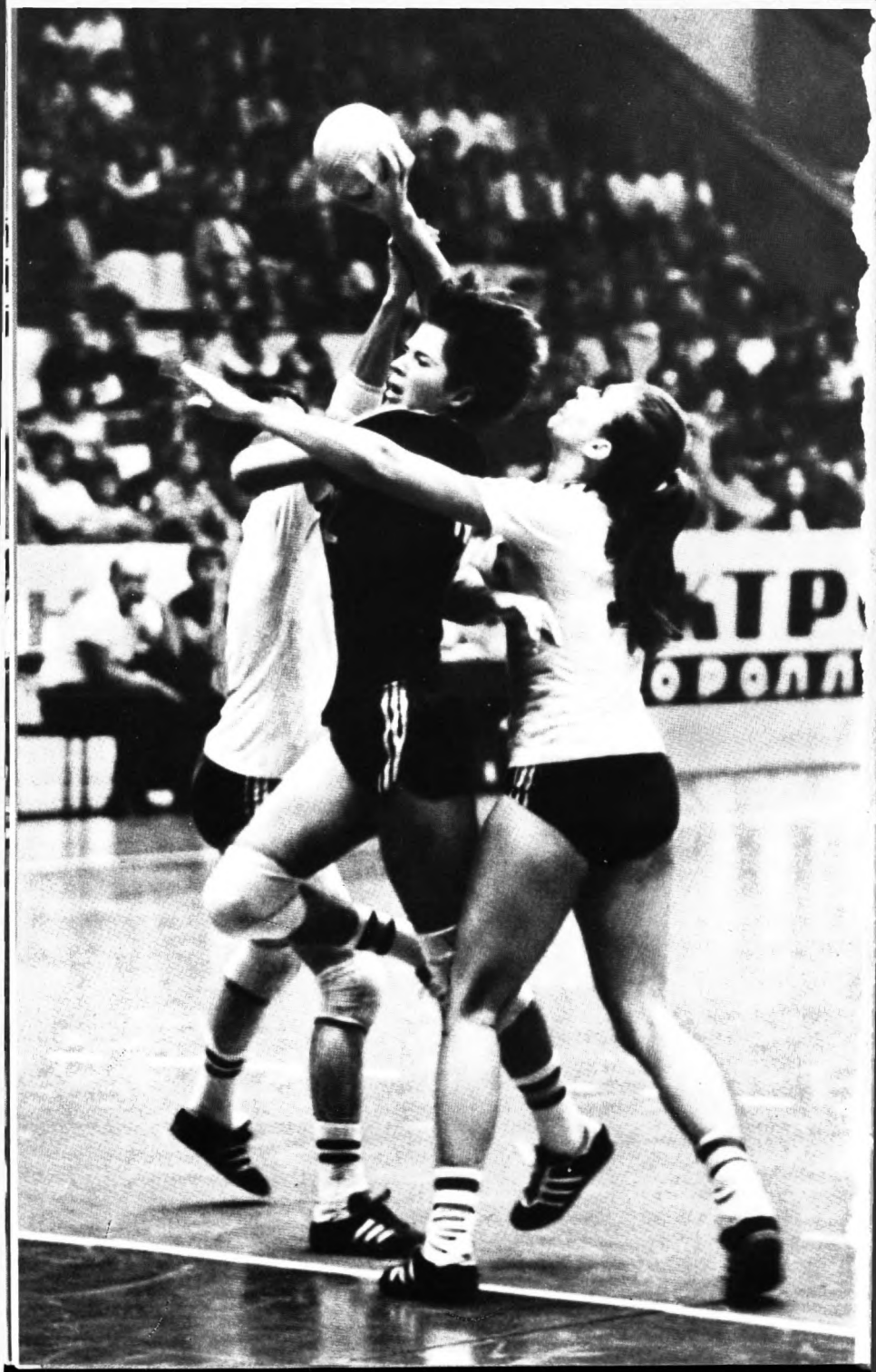
The material and technical base of the Republic's TV and radio network is being continuously strengthened and updated. In operation today are 45 powerful TV centres and 252 low-power repeater stations. Colour TV and stereo-broadcasts are a maior trend in the development of the branch. Programmes in colour are telecast today by the studios in Kiev, Dnipropetrovsk, Donetsk, Kharkiv, Odessa, Simferopol, Lviv, Uzhgorod and other cities.

The great influential powers of television and radio were effectively utilized during the past five-year period. The ideological content and artistic level of the programmes were substantially improved, and well-timed newscasts became more informative and operative.

Progress achieved by the Ukraine and the whole Soviet Union in solving the cultural development tasks set by the 25th CPSU Congress for the 10th Five-Year Plan laid a good foundation for the further advancement of Soviet science and culture.

The 26th CPSU Congress emphasized the necessity to promote the development of socialist culture and arts and raise their role in shaping a Marxist-Leninist outlook and in meeting more and more the diversified cultural needs of the Soviet people.

Physical Culture and Sports



As was stressed at the 26th CPSU Congress, concern for people's health is inseparable from the development of physical culture and sport. In close relationship with the ideological, political, labour and moral upbringing of people, physical culture and sport play a major role in strengthening their health and preparing them for work and the defence of the Soviet Homeland.

The development of physical culture and sport in the Ukraine involves a steady improvement in training qualified physical education specialists, the adequate use of the broad network of specialized sports institutions, and the increasingly wide application of scientific and medical achievements to sports. The Republic's three physical culture colleges, three physical culture secondary specialized schools and 14 departments of physical education of pedagogic institutes turn out more than 4,500 specialists a year. The number of physical culture workers in regular employment in the Ukraine has reached 55,500, of whom nearly 80 per cent have a higher or specialized secondary education. The number of physical culture activists working on a voluntary basis has also considerably increased.

The Republic's sports facilities can accomodate more than two million sportsmen at a time. Built in 1976–80 were 56 new stadiums, 20 public swimming pools, close to 1,500 gyms and 3,500 shooting ranges and galleries, bringing the total number of stadiums to 904, shooting ranges to 8,000, swimming pools to 271 (including 177 indoors) and gyms to 13,500. There have also appeared such unique sports facilities as Kiev's ice stadium, track-and-field gym and palace of sports in Kharkiv, sports palaces in Odessa and Zaporizhya and a sports complex in Lviv. While preparing for the Olympics-80, the people of Dnipropetrovsk built 80 new sports facilities, including the permanent structures of the rowing canal, winter sports palace and others. Many sports facilities were put up or modernized in Kiev which hosted the soccer preliminaries of the 22nd Olympics, and among them the splendid Republican Stadium.

Much attention is being given to the physical upbringing of preschool and schoolchildren. The introduction of improved physical training curricula and specialized PT classes in schools of general education, regular school-children tournaments and popular children football, ice hockey and chess competitions increased the legion of sports supporters by 2,259,000 raising the number of boys and girls engaging in sports to 4,179,000 in 1979.

Ukrainian sports organizations concentrate on supplying 'big sport' with young reserves. Replacements are trained at the Republic's 865 children and youth sports schools (in 1975 the figure was 789) which include 112 specialized schools of the Olympic reserve, 11 schools of superior sports skills, 6 boarding schools of general education with an emphasis on sport and more than 600 specialized sports forms in general schools attended by 322,000 pupils. The number of coaches giving instruction in these establishments is near to 9,500.

Physical education is also a big thing in vocational technical schools which incorporate more than 580,000 athletes.

Sports sections in secodary specialized schools can boast an ever growing attendance too.

College and university students are keen followers of sports. Regular participants in the 158 sports clubs of the

Ukraine's institutions of higher learning are more than 409,000 students.

The Republican physical culture organizations train ever more athletes in popular sports grades (4,891,000 in 1980 against 3,062,000 in 1975). Over the same period the number of sportsmen qualifying for First rating and the Candidate Master and Master of Sport titles increased from 34,816 to 61,182. The athletes' skills are steadily improving, especially in the Olympic events.

Each year adds to the number of Ukrainian Masters of Sport of international rating. In the 10th Five-Year Plan 7,062 sportsmen qualified for the Master of Sport title and 899 for the Master of Sport, international rating, title (as compared to 5,863 and 257, respectively, over the preceding five-year period).

The 22nd Olympic Games were a focal sports event in the life of our country and of the whole world. The Games, the first ever held in a socialist country, entered a new brilliant page in the chronicles of the modern Olympic movement. The amazing sports achievements at the Moscow Olympics are a striking illustration of the truly mass character of physical culture and sport in our country, of their being a nation-wide affair and a matter of constant Party and state concern.

Sportsmen from Soviet Ukraine ponderably contributed to the achievements of Soviet sportsmen at the Moscow Olympics (who won 80 gold, 69 silver and 46 bronze medals). Participating in the Olympics as part of Soviet combined teams, the Ukrainian sportsmen won 38 gold, 19 silver and 18 bronze medals in individual and team events.

The accomplishments of Soviet sport are quite obvious. However, said L. I. Brezhnev in his report to the 26th CPSU Congress, Soviet communists have always been interested "not only in top athletic achievements, but, above all, in giving physical culture and sport a mass character... Physical culture should be part of the every day life of large segments of the population, particularly of children."

Soviet Ukraine in the International Arena

The Soviet Union is consistently pursuing its programme of struggle for peace and international cooperation, for freedom and independence of nations, and for detente; its impact on the development of international events is steadily growing, stated the 26th CPSU Congress.

The Ukrainian SSR, with its high economic potential and outstanding cultural and scientific accomplishments, is an active participant in the Soviet Union's versatile international activities.

The illustrious achievements of the Ukrainian people, as of the rest of the Soviet nations, are a worthy contribution to the strengthening of the Soviet Union's international prestige and its policy of peace, international cooperation, freedom and independence of the peoples of the world.

The legal foundation of the Ukrainian SSR's participation in international affairs was established by the Law enacted on February 1, 1944, by the USSR Supreme Soviet, which gave the Union republics the required powers of a subject of international law and sanctioned the creation of union-republican people's commissariats (later renamed

into ministries) for foreign affairs. In compliance with this Law, the Presidium of the Supreme Soviet of the Ukrainian SSR and the Ukrainian government were empowered to represent the Republic on the international scene and take over the control of relations with foreign states.

A Ukrainian delegation headed by D. Z. Manuilsky, People's Commissar for Foreign Affairs of the UkrSSR, was present at the San Francisco Conference (1945) which took the decision to form the United Nations. Together with the USSR and the Byelorussian SSR, the Ukrainian SSR was among the founding members of this organization. The drafts of the UN most important documents on the Organization's aims and the principles of its Charter were drawn, in 1946, in UN Committee No. 1 chaired by the head of the UkrSSR delegation, D. Z. Manuilsky.

In the postwar years the Ukrainian SSR took part in the work of the Paris Peace Conference (1946) and the Belgrade Conference of Danube States (1948), and joined a number of international organizations, such as the UN Economic Commission for Europe (1947), the International Telecommunication Union (1949), etc. In 1954 the UkrSSR became member of the International Labour Organization (ILO) and of the United Nations Educational, Scientific and Cultural Organization (UNESCO). In 1957 the Ukraine was among the founders of the International Atomic Energy Agency (IAEA). Beginning from 1964, the UkrSSR has been active in the United Nations Conference on Trade and Development (UNCTAD) which promotes the development of international trade and mutual economic relations.

Ukrainian delegations took part in every session of the UN General Assembly. Representatives of the Ukraine were time and again elected members of this organization's leading bodies: the Security Council, the UN Commission on the Rights of Man, the UN Population Commission as well as a number of UN Committees, etc. The UkrSSR participated in the Administrative Council of the International Labour Organization, in the ILO Iron and Steel Committee, the ILO Coal Mines Committee, the ILO Building, Civil Engineering and Public Works Committee, and so on.

The UkrSSR initiated the discussion in the UN, ILO and other international organizations of such most pressing problems as struggle for peace and prohibition of mass destruction weapons. The Ukraine's delegation to the UN co-authored the drafts of the International Convention on the Elimination of All Forms of Racial Discrimination, the Treaty on the Nonproliferation of Nuclear Weapons and the Declaration on Granting Independence to Colonial Countries and Peoples. On the Ukraine's initiative, the UN Economic Commission for Europe discussed the draft resolutions on the utilization of water resources and on economic, scientific and technical cooperation; the International Atomic Energy Agency debated the draft programme of technical assistance to developing countries, etc. The UkrSSR is represented at the UN in New York and the UN Headquarters and other international organizations in Geneva.

The Soviet Ukraine actively cooperates with other nations in UNESCO. On the proposal of the UkrSSR, UNESCO included into its calendar the jubilee dates of T. Shevchenko, I. Franko, Lesya Ukrainka, M. Kotsyubinsky and other prominent figures of Ukrainian literature and science. In 1968, together with other delegations the UkrSSR submitted a resolution to the 15th Session of UNESCO's General Conference on participation in celebrating V. I. Lenin's birth centenary. On UNESCO's decision, a number of arrangements were made to honour the birthday jubilee of the great man of genius, including a seminar "V. I. Lenin and Development of Science, Culture and Education".

The Ukrainian SSR's international esteem is best proved by the fact of its participation in more than 100 intergovernmental and multilateral treaties and agreements, including the Vienna Convention on diplomatic relations, the International Convention on the elimination of all forms of racial discrimination, the Pacts on human rights, the Treaty banning the testing of nuclear weapons in the atmosphere, the outer space and under water, and others. Eight socialist community countries have their consulates in the Ukraine: Bulgaria, the German Democratic Republic, Poland, Rumania, Hungary, Czechoslovakia and Yugoslavia in Kiev, and Cuba and Bulgaria in Odessa which also has a consulate of India.

Work of especial importance aimed at the development of international contacts is carried on by the Party and administrative organizations of twinned regions and towns. Twenty three regional and six city committees of the Communist Party of the Ukraine maintain relations with fifty-eight regional and city committees of the Communist and Workers Parties of Bulgaria, the GDR, Poland, Rumania, Hungary, Czechoslovakia and Yugoslavia. The Ukrainian capital, Kiev, for instance, keeps up close ties with its twin cities Krakow (Poland), Leipzig (the GDR), Bratislava (Czechoslovakia) and others.

Beginning from 1964, Party organizations of the Ukraine and of the other socialist community countries regularly conclude agreements on the development of international links between the twinned regions and towns.

The fraternal cooperation envisages systematic exchange of delegations, study of organizational and ideological work, and mutual enrichment with experience acquired by Party, trade union and youth organizations and local bodies of administration. Frequent exchange of lecturers helps acquaint people with the life of sister-nations.

Each year dozens of "friendship trains" arrive in the Ukraine from all regions and many cities of the socialist states which, in turn, play host to visitors from the Ukraine.

International contacts with capitalist and developing states are also expanding. Fourteen Ukrainian cities and two city districts of Kiev maintain friendly relations with thirty-eight cities in these countries. Large-scale contacts have been established between Kiev and its twins Florence (Italy), Kyoto (Japan), Tampere (Finland) and Toulouse (France), between Odessa and the Italian seaport of Genoa, between Zaporizhya and the industrial city of Birmingham (Great Britain), and between Kharkiv and Bologne (Italy). These relations encourage friendship and mutual understanding among nations, and strengthen peace and democracy.

Important contribution to the development of relations with other nations is made by the Ukrainian Society for Friendship and Cultural Relations with Foreign Countries, the Ukrainian Peace Committee, the Association for Cultural Relations with Ukrainians abroad ("Ukraina" Socie-

ty), as well as scientific, engineering, sports and other societies and organizations of the Republic.

During the half century of its activities the Ukrainian Society for Friendship and Cultural Relations with Foreign Countries has established contacts with more than 600 partners in socialist, capitalist and developing countries. The Society busily participates in promulgating abroad the achievements of Ukrainian Soviet culture: it mounts exhibitions, organizes inspiring gettogethers with workers of culture, screens films, spreads information, and distributes fiction and socio-political literature to give the foreign public a broad picture of the gains of socialism, the life of the Soviet people and the lofty ideas of Leninism. The "Ukraina" Society brings Ukrainians in Canada, the USA and other countries true word about the happy life of the Soviet people.

But the best advocate of the ideas of socialism is the reality of the Soviet Ukraine and other constituent republics. Fully convinced of that are numerous groups of foreigners visiting the 1500-old capital of the Ukraine, Kiev, and other cities and villages of the Republic with the aid of "Intourist" or "Sputnik" travel agencies or on the invitation of public organizations. In 1980 Kiev gave a particularly hearty welcome to the participants and guests of the 22nd Olympic Games and those entrusted with carrying the Olympic torch of peace and peoples' friendship across the hospitable Ukrainian land.

The Ukraine makes a worthy contribution to the economic, scientific and technical cooperation of the Soviet Union with foreign countries. The high economic potential and convenient geographical position ensure the Republic a distinguished place in the Soviet Union's foreign trade. Machines and equipment put out by Ukrainian factories, iron ore, agricultural products and chemicals are exported to nearly 100 countries. More than 1,100 industrial enterprises of the Republic sell their products to foreign markets. Automatic and semiautomatic machine tools bearing the trademark of the M. Gorky Plant are well known in more than 30 countries, and products manufactured by the "Chervony Ekskavator" Factory are sent to 50 countries. The greater part of Ukrainian foreign sale goes to the socialist community countries; the two above-mentioned enterprises, for example, send there nine-tenths of their

export. In 1962 the Ukrainian SSR started deliveries to Czechoslovakia of the powerful T-679 locomotives produced by the Voroshilovgrad Diesel Locomotive Plant; at a ceremonial meeting in 1979 the Plant handed the Czechoslovak partners the 600th jubilee machine.

The economic, scientific and technical relations between the USSR and the fraternal socialist states became expressly fruitful and versatile after the adoption in 1971 of the socialist economic integration programme. Within its framework, the Lviv Bus Plant successfully cooperates with partners in Poland and Hungary, the Ternopil Combine Harvester Plant gets assemblies for its KC-6 combine from the Farm Equipment Factory in Torgau (the GDR); Czechoslovakia takes part in the construction of the Dnipropetrovsk Concentration Combine, Poland helps to put up the Pivnichny Concentration Combine in Kriviy Rih, and the GDR participates in increasing the capacities at the Krasnoperekopsk Soda Factory for the production of soda ash.

Assistance to foreign socialist partners in mastering new technology and bringing production to the designed mark has now become a tradition. 1,600 workers from the V. I. Lenin Metallurgical Combine in Krakow (Poland) were schooled and trained at industrial enterprises of Zaporizhya and Zhdanov. Specialists from the Kiev "Khimvolokno" Productive Amalgamation helped their Bulgarian friends to speed up to construction of the "Sviloza" Chemical Combine in the Bulgarian city of Svishtov.

Many Ukrainian collective and state farms keep up contacts with their foreign counterparts. Regular exchange of combine operators is going on between Transcarpathian and East-Slovak farms. In 1979 twenty-six young combine operators who had won a regional machine operators' competition held in Zhitomir in honour of the 60th anniversary of the Ukraine's Young Communist League went to Bulgaria to join in gathering the harvest in Mikhailovgrad District. Ukrainian crop dusters for many years now engage in farming operations in the German Democratic Republic.

Transport is an important link in the system of socialist economic integration, which makes the need for cooperation in this field quite pressing. Nearly all major transport arteries between the USSR and the European socialist

states pass through the Ukraine, including the "Mir" (Peace) power grid, the "Druzhba" (Friendship) oil pipeline, the "Braterstvo" (Brotherhood) gas pipeline and a number of main railway lines. The superhigh-voltage power transmission line linking Vinnitsya in the Ukraine and Albertirsa in Hungary was put into operation in 1978 to supply 6,400 million kWh of electricity a year to the united power grid of the European socialist countries. The intensively developing Soviet-Bulgarian economic relations necessitated a Black Sea railway ferry. It was commissioned in November, 1978, to link Odessa in the Ukraine and Varna in Bulgaria.

The Soviet Union's expanding contacts with the socialist community countries in the field of science and technology involve increased and productive participation of Ukrainian research institutions. Ukrainian science's high international prestige is evident from the fact that a number of institutes of the UkrSSR Academy of Sciences have been selected as coordinating centres for carrying out the CMEA (Council for Mutual Economic Assistance) integrated scientific-technological programmes. Among them is the Y. Paton Institute of Electric Welding which since 1972 coordinates research into the problems of metal welding conducted by scientists in the fraternal countries, and the Institute of Cybernetics of the UkrSSR Academy of Sciences. The Institute of Materiology Problems, for instance, is tackling problems of powder metallurgy in close cooperation with research establishments of Bulgaria, the GDR and Czechoslovakia. The UkrSSR Academy of Sciences' Institute of Geophysics directs research into the problem of "Planetary Geophysical Explorations" carried out in accordance with the plans elaborated by the Commission on multilateral cooperation of the socialist countries' academies of sciences.

Also fruitful are the extending bilateral links between research establishments and industrial enterprises of the Ukraine and their counterparts in the socialist states. Specifically, researchers from the UkrSSR Academy of Sciences' Institute of Foundry Problems together with specialists from the "Technology of Metals" Scientific-Technical Association of Bulgaria have developed casting techniques based on the application of aluminium alloys. The staff of the Kiev "Vulkan" Factory and their Hunga-

rian partners have developed a new method of moulded porous rubber production. Scientists from the All-USSR "Kompressormash" Institute, located in the Ukrainian city of Sumy, together with researchers from the GDR have designed the unique "Polymer-50" plant for the production of polyethylene under high pressure.

The Republic's industrial enterprises and research institutions take an increasingly active part in the development of the Soviet Union's economic, scientific and technical cooperation with capitalist and developing countries. Production of Ukrainian factories is part of the Soviet Union's export to many of these countries. Equipment with Ukrainian factories' trademark is installed, for example, in metallurgical plants in Bhilai and Bokaro (India) and in factories in France. Process designs for electroslag casting developed at the Y. Paton Institute of Electric Welding have been patented by the USA, Japan, the FRG, Sweden and other countries.

The participation of the UkrSSR in the Soviet Union's multifarious international relations is a graphic illustration of the triumph of the Leninist ideas of internationalism and a weighty contribution to the common struggle of the peoples of our country for peaceful coexistence, friendship and cooperation among all nations of the world.

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